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August 14, 2020

Omer Shalev
Environmental Engineer
United States Environmental Protection Agency
75 Hawthorne Street
San Francisco, California 94105

Subject: Quarterly Performance Evaluation Report, Second Quarter 2020
Full Scale On-Site Soil Remedy
Omega Chemical Superfund Site, Operable Unit 1, Whittier, California

Dear Mr. Shalev:

Enclosed for your review is the second quarter 2020 Performance Evaluation Report for the Full Scale On-Site Soil Remedy, Omega Chemical Superfund Site, Operable Unit1, Whittier, California.

Should you have any questions, regarding the above, please contact me.

Sincerely,

Omega Chemical Site PRP Organized Group

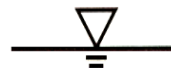


Edward Modiano
Project Coordinator



Jaime Dinello, PE
Project Manager

cc: Don Indermill, DTSC



de maximis, inc.

AUGUST 14, 2020

FULL SCALE ON-SITE SOIL REMEDY
PERFORMANCE EVALUATION REPORT
SECOND QUARTER 2020
OMEGA CHEMICAL SUPERFUND SITE, OU-1

Prepared for:

Omega Chemical Site
PRP Organized Group
(OPOG)

Prepared by:

de maximis, inc.
1322 Scott Street, Suite 104
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FULL-SCALE ON-SITE SOIL REMEDY OMEGA CHEMICAL SUPERFUND SITE, OU-1

Quarterly Performance Evaluation Report Second Quarter 2020

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FULL-SCALE ON-SITE SOIL REMEDY

OMEGA CHEMICAL SUPERFUND SITE, OU-1

Quarterly Performance Evaluation Report

Second Quarter 2020

1. INTRODUCTION

This Quarterly Performance Evaluation Report (QPER) has been prepared on behalf of the Omega Chemical Site Potentially Responsible Parties Organized Group (OPOG) to comply with the October 6, 2010 Consent Decree No. 10-05051 (CD) between United States Environmental Protection Agency (USEPA) and OPOG (USEPA, 2010). The CD requires OPOG to design, construct, and operate a full-scale soil vapor extraction (SVE) and treatment system and perform associated monitoring to address vadose zone soil within Operable Unit 1 (OU-1). The CD Statement of Work satisfies the requirements of the 2008 OU-1 Record of Decision (ROD) (USEPA, 2008). Figure 1 shows the general location of OU-1, as well as the occupancy status of buildings within the operable unit. The locations of the OU-1 SVE system components, including the associated Vapor Extraction Wells (VEWs), the Dual Phase Extraction (DPE) wells, the treatment plant, and the associated Vapor Monitoring Probes (VMPs), are presented in Figure 2.

Remedial Action Objective (RAO) compliance monitoring includes the collection of soil gas and indoor air data within the OU-1 boundary. Current monitoring requirements are as follows:

- OU-1 SVE system operational data are collected to determine whether treated vapor emissions are substantively compliant with South Coast Air Quality Management District (SCAQMD) requirements as well as to conform to the requirements of the Draft OU-1 SVE Operations, Maintenance, and Monitoring (OM&M) Manual (CDM Smith, 2018a). OPOG responded to USEPA's comments on the Draft OM&M Manual and Sampling and Analysis Plan on June 18, 2019. Following a response from USEPA, OPOG will revise and resubmit the Draft OM&M Manual. These data are included in Section 2.

- Shallow soil gas data are collected semi-annually during the first and third quarters from specified VMPs in the shallow vadose zone (0 – 30 feet below ground surface [bgs]). Thus, no shallow soil gas data were collected this quarter.
- Deep soil gas data are collected semi-annually during the first and third quarters from specified VMPs in the deep vadose zone (40 – 70 feet bgs). Thus, no deep soil gas data were collected this quarter.
- Indoor air data are collected semi-annually during the first and third quarters from within occupied OU-1 buildings. Thus, no indoor air data were collected this quarter.
- Soil concentration data in the shallow vadose zone (0 – 30 feet bgs) will be collected in the future after mutual agreement between USEPA and OPOG.

2. OU-1 SVE SYSTEM OPERATIONS THIS QUARTER

The OU-1 SVE System functioned this quarter with minimal issues or downtime, with the exception of between May 29 and June 5, 2020. On May 29, 2020, the photoionization detector (PID) reading of the effluent was above the limit stipulated in the existing Health Risk Assessment (HRA, CDM Smith, 2015). Out of an abundance of caution, an effluent sample was collected to confirm that the discharge vapor was in compliance with the HRA, and then the system was shut down. Following receipt of the analytical results (included in Table 1) showing confirmation of continued compliance with the HRA, and after re-checking the effluent with a PID, the system was restarted on June 5, 2020. Though the cause of the elevated PID result is unknown, the analytical data (showing continued compliance) are considered definitive and sufficient. Below are additional noteworthy maintenance events which occurred in the second quarter:

- April 13, 2020 – OU-1 SVE alarms were tested and all alarms functioned as designed.
- May 22, 2020 – The existing 8-inch GAC vessel hoses were replaced with new 6-inch ultraviolet (UV) protected corrugated hoses. The glue utilized for the new hose connections may have contributed to the elevated PID readings on May 29, 2020.
- June 5, 2020 – A new hour meter was installed (the previous hour meter stopped working on May 16, 2020). A bezel was installed over the hour meter on June 19, 2020.

Approximately 4.7 pounds of VOC mass were removed from soil gas this quarter, compared to 6.1 pounds removed in the previous quarter. Figure 3 shows the cumulative mass removed since 2010.

VACUUM BLOWER

As shown in Attachment A, Table A-1, the OU-1 SVE system functioned this quarter with an up time of approximately 87%.

VAPOR EXTRACTION WELLS (VEWs) AND DUAL PHASE EXTRACTION (DPE) WELLS

All OU-1 SVE system VEWs and DPE wells were mechanically functional during this quarter, except for DPE-3 which generally did not operate between April 30 and June 14, 2020 due to a faulty pressure transducer and flow meter display (which were replaced). VEW and DPE well operational data, including flow rate, total volatile organic compound (VOC) concentrations, as measured by PID readings and laboratory analyses (if analytical samples were collected), vacuum, temperature, relative humidity, and estimated mass removed per well during the quarter are presented in Attachment B, Table B-1. No VEW influent manifold valve adjustments are recommended this quarter.

VAPOR MONITORING PROBES

The extraction wells provided enough vacuum influence to continue to remove mass and mitigate vapor migration. Per the EPA-approved soil gas memo, vacuum/pressure monitoring at specified VMPs shall be conducted quarterly, and analytical monitoring shall be conducted semi-annually (typically first and third quarters) except for select VMPs which are monitored for both vacuum and analytical concentrations annually. A summary of the VMP vacuum monitoring performed this quarter is included in Attachment C (Tables C-1/Figure C-1 and Table C-2/Figure C-2 for shallow and deep VMPs respectively). Semi-annual VMP analytical monitoring was not conducted this quarter. Figures 4 and 5 are placeholders for presentations of concentrations of PCE and TCE measured during a quarter.

Attachment D serves as a placeholder for monitoring data collected from other VMPs not included in the EPA-approved soil gas memo (note that no VMPs of this type were sampled this quarter).

TREATED VAPOR DISCHARGE

The OU-1 SVE system operated in accordance with treated vapor discharge limits and VGAC operational requirements. The VGAC changeout criteria were not triggered during this quarter (Attachment A). The criteria are currently based on the existing HRA, which is currently being reviewed by USEPA as part of the revised OU-1 SVE OM&M Manual. The most recent carbon changeout of the lead and lag vessels was completed on March 15, 2019.

Table 1 shows the VOC concentrations in the VGAC influent, midpoint, and effluent samples and effluent discharge limits. Figure 6 shows VGAC influent concentrations for PCE and TCE since 2010. Attachment A, Table A-1 shows the flow rate, temperature, and total VOC concentrations, as measured using a PID. Figure A-1 shows selected parameters over time.

Operational field forms (for all monitoring discussed in this section) are provided in Attachment E. Analytical laboratory reports are provided in Attachment F. A summary of the results of the data quality assessment and data validation reports are provided in Attachment G.

3. SOIL GAS COMPLIANCE MONITORING

Per the EPA-approved soil gas memo, semi-annual VMP analytical monitoring was not conducted this quarter.

4. INDOOR AIR COMPLIANCE MONITORING

The occupancy status and current monitoring schedule for each building is summarized in Table 2. Indoor air sampling is generally only conducted in buildings that are occupied. Occupancy status is verified each quarter.

As discussed above, indoor air compliance monitoring is conducted during the Annual (January) and Semi-Annual (July) monitoring events. Thus, no routine indoor air monitoring was conducted during the second quarter. Figure 7, not included this quarter, is a placeholder to present indoor air monitoring results for PCE and TCE. Attachment H is a placeholder for a summary of indoor air monitoring results.

5. SUBMITTALS DURING THE QUARTER

The following submittals were made this quarter as part of the OU-1 Full Scale On-site Soil Remedy:

- Full Scale On-site Soil Remedy QPER, First Quarter 2020 (May 15, 2020)

6. PLANNED ACTIVITIES

Planned operational and monitoring activities scheduled for the next quarter include the following:

- Monthly vacuum, flow, temperature and PID monitoring at VEWs and DPE wells
- Quarterly vacuum monitoring and semi-annual analytical monitoring at VMPs
- Annual monitoring of VEWs
- Review of VEW, DPE well, and VMP data to assess the need for optimizing performance
- Monthly assessment of VGAC effectiveness and need for VGAC changeout
- July Semi-Annual IAQ monitoring event per the submitted 2020 Indoor Air Quality Sampling Plan (de maximis, 2020)
- Quarterly performance reporting

7. PROBLEMS OR ISSUES OF CONCERN

None.

8. REFERENCES

- CDM. (2007). *Final Human Health Risk Assessment for On-Site Soils*
- CDM Smith. (2015). *Memorandum: Treatment of Effluent from Groundwater Treatment System and Soil Vapor Extraction, Omega Chemical Superfund Site, Whittier, California 90602, February 26*
- CDM Smith. (2018a). *DRAFT – Operable Unit 1 Soil Vapor Extraction System Operations, Maintenance, and Monitoring Manual, December 21.*
- CDM Smith. (2018b). *Revised 2018 Operable Unit 1 (OU-1) On-site Soil Remedy Soil Gas Monitoring, August 27*

de maximis, inc. (2020). *2020 Indoor Air Quality Sampling Plan, Omega Chemical Superfund Site*.
November 26
USEPA. (2008). *Record of Decision for OU-1 Soils*.
USEPA. (2010). *Consent Decree Docket No. 10-05051, October 6*

TABLES

Table 1
Vapor Phase GAC Analytical Data Demonstrating Substantive Compliance With SCAQMD Regulations
OU-1 Full Scale On-Site Soil Remedy, Omega Chemical Superfund Site
Second Quarter 2020

SCAQMD Chemical-Specific Effluent Limit ¹			2,208	198	84	15	14	48	1,082	65
Sample Location	Sample Date	Units	PCE	TCE	VC	11DCA	12DCA	CF	MeC	BEN
OU-1 SVE GAC INFLUENT	4/7/2020	ppbv	52	4.8	1.2 U	1.2 U	1.2 U	1.2 U	12 U	1.2 U
OU-1 SVE GAC MIDPOINT	4/7/2020	ppbv	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	12 U	1.2 U
OU-1 SVE GAC EFFLUENT²	4/7/2020	ppbv	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	12 U	1.2 U
OU-1 SVE GAC INFLUENT	5/8/2020	ppbv	60	5.3	1.2 U	1.2 U	1.2 U	1.2 U	12 U	1.2 U
OU-1 SVE GAC MIDPOINT	5/8/2020	ppbv	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	11 U	1.1 U
OU-1 SVE GAC EFFLUENT²	5/8/2020	ppbv	1.1 U	1.1	1.1 U	1.1 U	1.1 U	1.1 U	11 U	1.1 U
OU-1 SVE GAC EFFLUENT²	5/29/2020	ppbv	91	14	1.2 U	1.2 U	1.2 U	1.2 U	12 U	1.2 U
OU-1 SVE GAC INFLUENT	6/12/2020	ppbv	52	5	1.3 U	1.3 U	1.3 U	1.3 U	13 U	1.3 U
OU-1 SVE GAC MIDPOINT	6/12/2020	ppbv	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	13 U	1.3 U
OU-1 SVE GAC EFFLUENT²	6/12/2020	ppbv	27	5.4	1.2 U	1.2 U	1.2 U	1.2 U	12 U	1.2 U
Compliance with Effluent Limits?			YES	YES	YES	YES	YES	YES	YES	YES

Notes:

1. SCAQMD effluent limits are derived from the Health Risk Assessment (CDM Smith, 2015).

2. Bold text indicates vapor effluent results from the VGAC effluent required to meet SCAQMD HRA chemical specific limits shown in the table.

OU-1 SVE GAC Influent = VOC-laden vapor sample collected at the influent to the lead VGAC vessel.

OU-1 SVE GAC Midpoint = Partially treated vapor sample collected between the lead and lag VGAC vessels.

OU-1 SVE GAC Effluent = Fully treated vapor sample collected at the effluent from the lag (polishing) VGAC vessel.

U - Not detected above reporting limit listed

PCE - Tetrachloroethene 12DCA - 1,2-Dichloroethane

TCE - Trichloroethene CF - Chloroform

VC - Vinyl Chloride MeC - Methylene Chloride

11DCA - 1,1-Dichloroethane BEN - Benzene

Table 2
Status of Indoor Air Sampling at Buildings Wholly or Partially within the OU-1 Phase 1a Boundary
OU-1 Full Scale On-Site Soil Remedy, Omega Chemical Superfund Site
Second Quarter 2020

Building	Location Designation	Building Occupancy	Vacancy Status Verification	Current Monitoring Status	Date Last Sampled	Next Planned Sampling Date	Sampling Rationale
Sunland Enterprises (Former Omega Administration)	Within OU-1 Boundary	Occupied	Verified in person 2Q2020	Annual	1/17/2020	January 2021	<ul style="list-style-type: none"> - Sampled as part of Remedial Investigation - Building unoccupied between 2005 and 2018. The building is currently leased to Sunland Enterprises, Division of E&A Car Wash Systems - EPA has not requested indoor air sampling under the 2009 AOC - Under influence of soil vapor extraction since 2011 - Building was incorporated into the annual monitoring program proposed in the 2020 Indoor Air Quality Sampling Plan (submitted to EPA on November 26, 2019)
Bishop	Partly within OU-1 Boundary	Occupied	Verified in person 2Q2020	Semi-Annual	7/13/2020 ¹	January 2021	<ul style="list-style-type: none"> - Required indoor air sampling under the 2009 AOC - Under influence of soil vapor extraction since 2010 - Reduced monitoring frequency from quarterly to semi-annual (approved by EPA in letter to OPOG on November 28, 2018).
Madsen Roofing	Within OU-1 Boundary	Partially Occupied	Verified in person 2Q2020	Annual	1/17/2020	January 2021	<ul style="list-style-type: none"> - Required indoor air sampling under the 2009 AOC - Under influence of soil vapor extraction since 2010 - Reduced monitoring frequency from semi-annual to annual (approved by EPA in letter to OPOG on November 28, 2018).
Star City Auto Body	Within OU-1 Boundary	Occupied	Verified in person 2Q2020	Annual	1/16/2020	January 2021	<ul style="list-style-type: none"> - Required indoor air sampling under the 2009 AOC - Under influence of soil vapor extraction since 2010 - Reduced monitoring frequency from semi-annual to annual (approved by EPA in letter to OPOG on November 28, 2018).
Terra Pave	Within OU-1 Boundary	Partially Occupied	Verified in person 2Q2020	Semi-Annual	7/13/2020 ¹	January 2021	<ul style="list-style-type: none"> - Required indoor air sampling under the 2009 AOC - Under influence of soil vapor extraction since 2010 - Reduced monitoring frequency from quarterly to semi-annual (approved by EPA in letter to OPOG on November 28, 2018).

Notes:

1. The dates reflected are from the July 2020 Semi-Annual sampling event which occurred prior to the submission of this report. These data will be included in the Third Quarter 2020 Report.

FIGURES

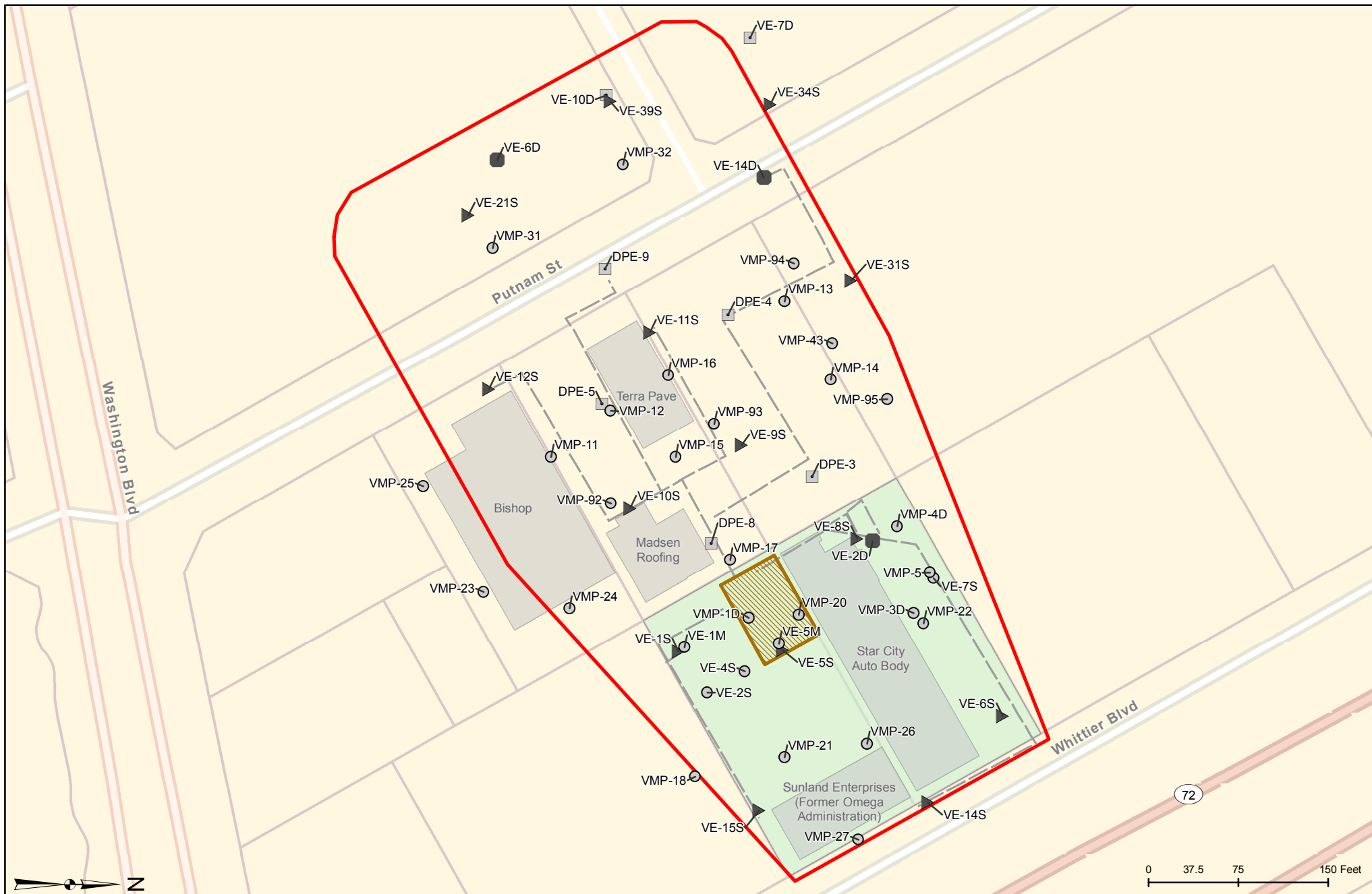


- OU-1 Boundary
- Building Currently Commercially/Industrially Occupied
- Building Currently Vacant
- Former Omega Chemical Property Boundary



Reviewed By: MH
 Drawn By: LEM
 Date: 7/9/2020

Figure 1
OU-1 Location Map
OU-1 Full Scale On-Site Soil Remedy,
Omega Chemical Superfund Site
12504/12512 East Whittier Boulevard
Whittier, California



- | | |
|---|---|
| ▲ Shallow Vapor Extraction Well (<30ft bgs) | ○ Vapor Monitoring Probe |
| ● Deep Vapor Extraction Well (>30ft bgs) | ▨ OU-1 SVE Treatment Plant |
| ■ Dual Phase Extraction Well | □ OU-1 Boundary |
| ■ Building Currently Commercially/Industrially Occupied | ■ Former Omega Chemical Property Boundary |
| □ Building Currently Vacant | — Conveyance Piping |

Not all conveyance piping shown. Locations are approximate.



Reviewed By: LM
Drawn By: KM
Date: 7/9/2020

Figure 2
OU-1 SVE System Location Map
OU-1 Full Scale On-Site Soil Remedy,
Omega Chemical Superfund Site

Figure 3
OU-1 SVE System Cumulative Mass Removed
OU-1 Full Scale On-Site Soil Remedy, Omega Chemical Superfund Site
Second Quarter 2020

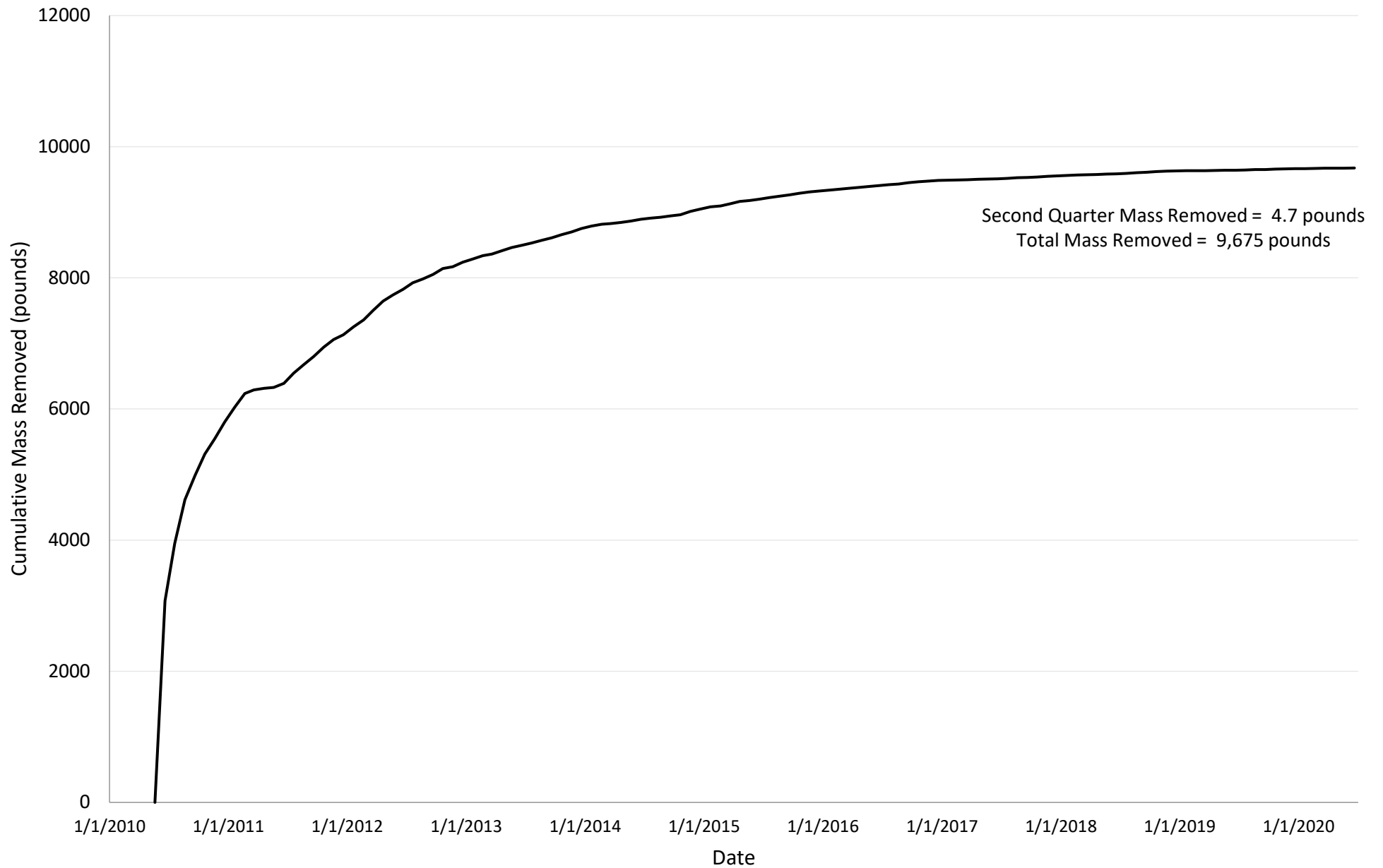
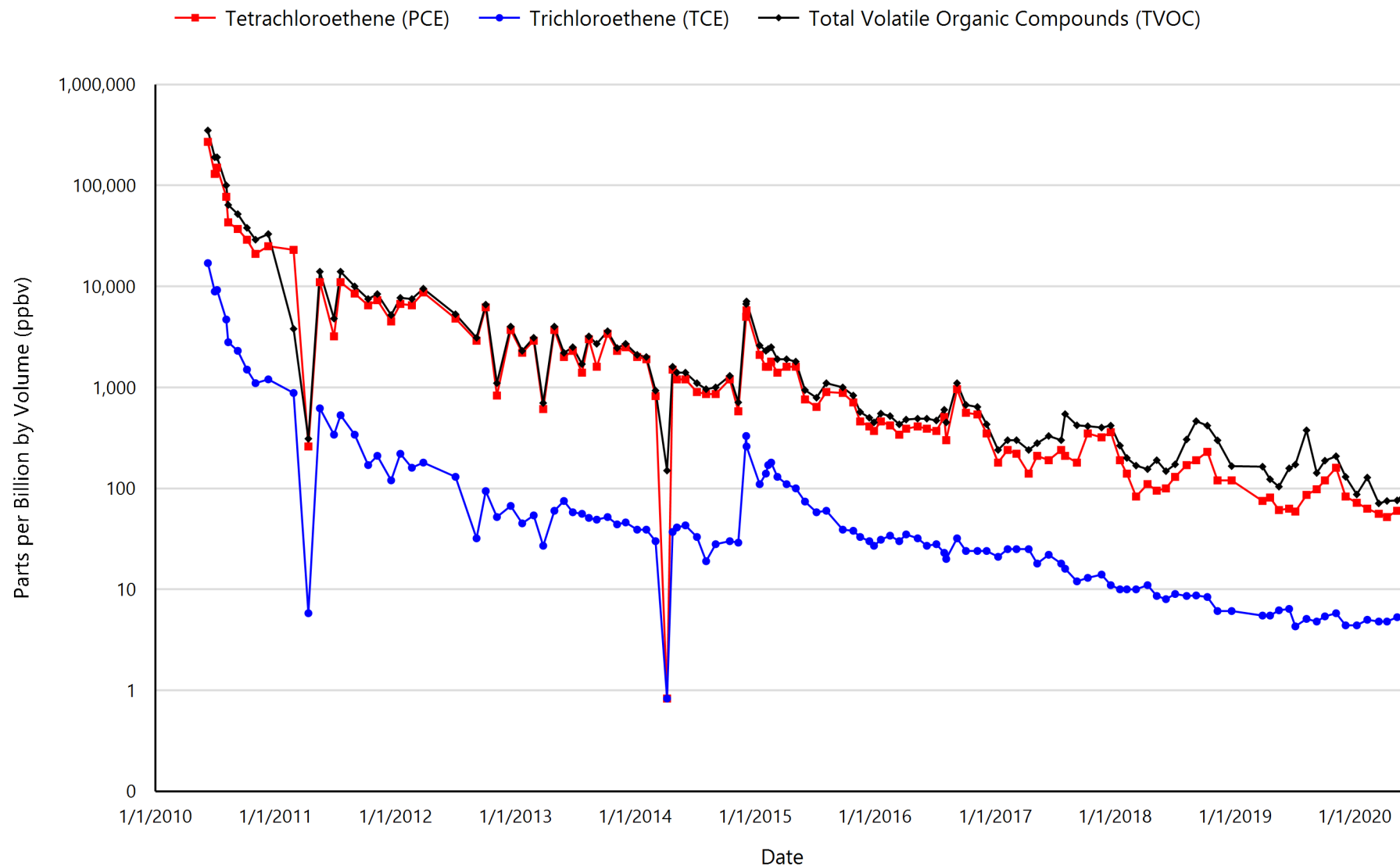


Figure 6
Vapor Phase GAC Influent Concentrations
OU-1 Full Scale On-Site Soil Remedy, Omega Chemical Superfund Site
Second Quarter 2020



ATTACHMENT A

OU-1 SVE System Operational Data

Attachment A, Table A-1

OU-1 SVE System Operational Data Demonstrating Substantive Compliance With SCAQMD Operational Limits OU-1 Full Scale On-Site Soil Remedy, Omega Chemical Superfund Site Second Quarter 2020

SCAQMD Limit ⁴				1280	145				15			
HRA Changeout Criteria								50 ³		90 ³		
Date	Interval Run Time (hr)	Up Time ⁵ (%)	Influent Vapor Relative Humidity (%)	Influent Vapor Flow Rate (SCFM)	VGAC Influent Vapor Temperature (°F)	VGAC Effluent Vapor Temperature (°F)	VGAC Influent PID Measurement (ppmv)	VGAC Midpoint PID Measurement (ppmv)	VGAC Effluent PID Measurement (ppmv)	Lead VGAC Efficiency ¹ (%)	Overall VGAC Efficiency ² (%)	Mass Removed (lbs, monthly total)
4/7/2020	262		70.3	1128	101.2	78.6	5.5	0.8	0.7	85	88	1.7
4/13/2020	143	99	80.8	1074	100.5	79.0	5.2	0.0	0.0	100	100	
4/21/2020	193	100	77.9	1119	104.7	84.4	8.0	2.3	1.7	71	79	
4/27/2020	76	53	72.9	1124	93.5	78.2	0.0	0.0	0.0	100	100	
5/8/2020	264	100	61.3	1114	105.2	87.4	17.9	4.2	2.2	77	88	1.3
5/15/2020	168	100	66.4	1133	103.7	86.1	6.7	1.9	1.4	71	78	
5/22/2020	168	100	62.8	1091	105.8	87.7	19.2	6.9	5.0	64	74	
5/29/2020	165	98	67.4	1096	103.4	86.7	20.0	8.2	15.2	59	24	
6/5/2020	8	5	72.2	1080	105.9	85.3	5.9	9.3	9.0	0	0	1.7
6/12/2020	166	99	63.2	1065	103.8	91.5	3.7	3.1	2.1	17	44	
6/19/2020	168	100	66.6	1079	104.0	88.7	0.0	0.0	0.0	100	100	
6/26/2020	170	100	59.4	1048	106.3	96.1	0.6	0.5	0.2	24	64	
2nd Qtr 2020 Average		87	68.4	1096	103.2	85.8	7.7	3.1	3.1	60	60	1.6
Total Mass Removed 2nd Qtr 2020												4.7
Compliance with SCAQMD Limits?				YES	YES				NO ⁶			
Carbon Changeout Required This Qtr?								NO		NO		

Notes:

°F = degrees Fahrenheit

PID = photoionization detector

SCFM = Standard Cubic Feet per Minute

Qtr = quarter

SCAQMD = South Coast Air Quality Management District

1. Lead VGAC efficiency is calculated by the PID readings between the influent and midpoint.

2. Overall VGAC efficiency is calculated by the PID readings between the influent and effluent.

3. Carbon changeouts are required when the efficiency across the lead VGAC vessel drops below 90% AND the midpoint concentration exceeds 50 ppmv as hexane, by PID during the same sampling event.

4. Limits are derived from the Health Risk Assessment (CDM Smith, 2015a).

5. Up Time is calculated as the percentage of time the system is operating between the date listed and the previous measurement date.

6. On May 29, 2020, the effluent PID reading was above the limit stipulated in the existing Health Risk Assessment (HRA, CDM Smith 2015). Out of an abundance of caution, an effluent sample was collected to confirm that the discharge vapor was in compliance with the HRA, and then the system was shut down. Following receipt of the analytical results showing confirmation of continued compliance with the HRA, and after re-checking the effluent with a PID, the system was restarted on June 5, 2020.

VGAC = vapor phase granular activated carbon

ppmv = parts per million by volume as hexane

Hr = Hour

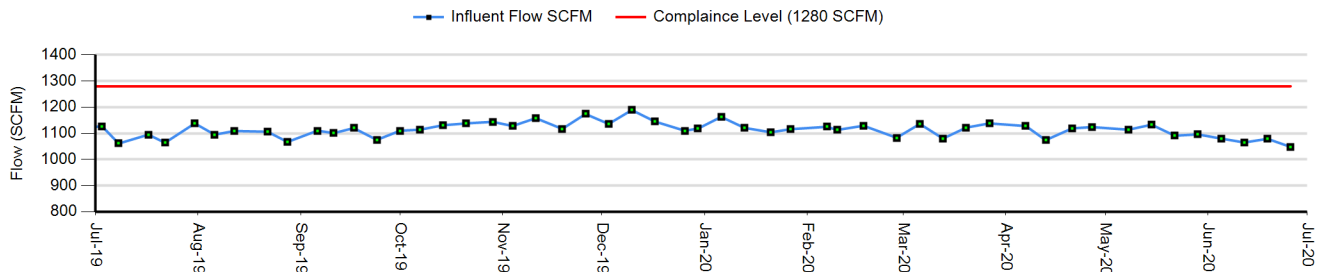
lbs = pounds

Attachment A, Figure A-1
OU-1 SVE System Operational Data (Rolling One Year)

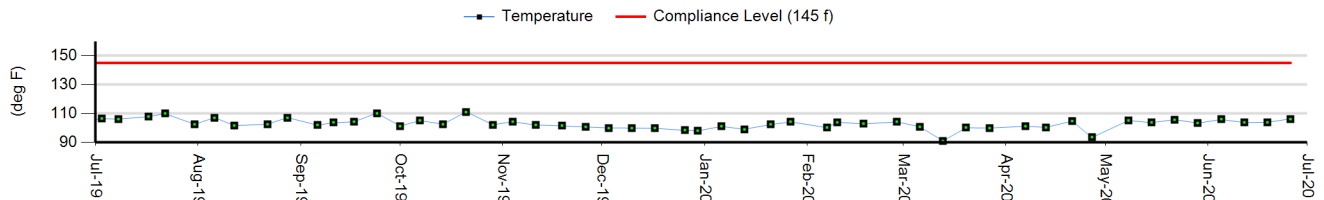
% Efficiency (PID) Across GAC Primary



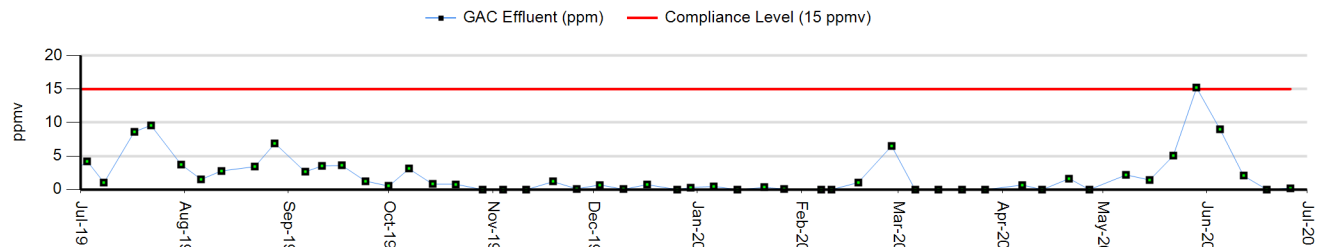
SVE INF Flow (SCFM)



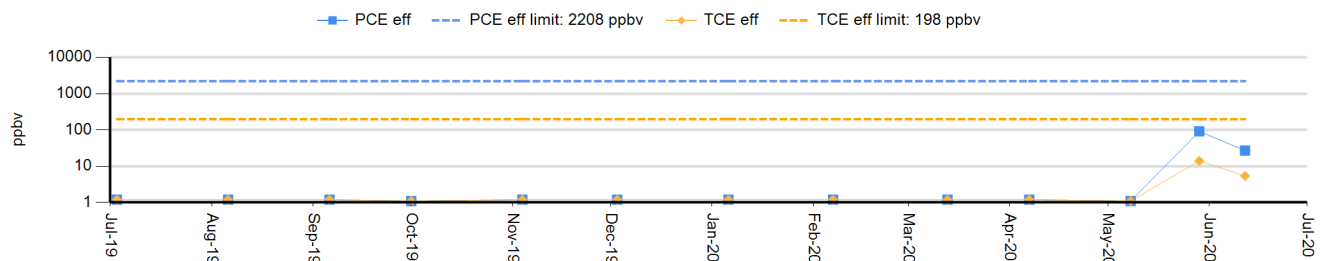
SVE GAC INF Temperature (deg F)



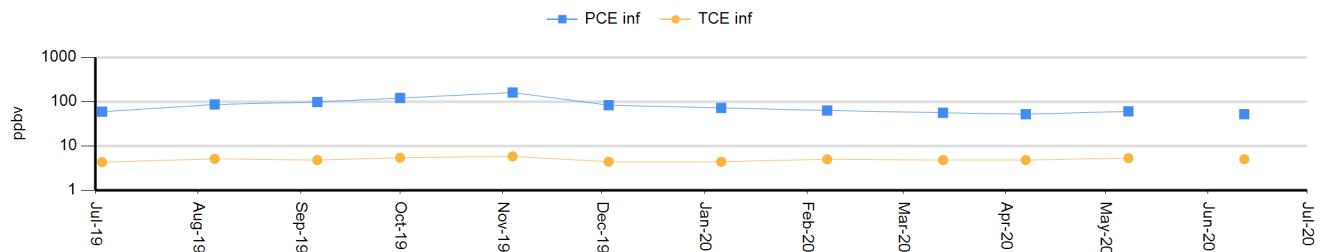
SVE GAC EFF PID (ppm)



SVE GAC EFF (analytical)



SVE GAC INF (analytical)



Kyle King

From: Day, Maria L. <dayml@cdmsmith.com>
Sent: Thursday, July 16, 2020 11:59 AM
To: Kyle King; Laura Millan
Cc: Reed, Alesandra F.; Bamer, Jeffrey
Subject: Omega OU-1 SVE GAC Assessment April 2020
Attachments: Omega OU-1 SVE GAC Changeout Assessment_April 2020.xlsx

**** WARNING EXTERNAL SENDER ****

Team,

We evaluated the performance of the GAC used by the OU-1 SVE system for the month of April 2020, relative to the conditions listed in the Health Risk Assessment (HRA) (CDM Smith 2015). These conditions must be met to remain in substantive compliance with SCAQMD requirements.

During the month of April, the OU-1 SVE system did not meet the conditions presented in the HRA and is therefore substantively compliant:

- None of the toxic air contaminants listed in Condition #14 of the HRA were detected in the effluent above their respective effluent limit.
- The OU-1 SVE system did not meet the two criteria for replacement of the lead GAC vessel (listed under Condition #12 of the HRA), and therefore no GAC replacement was required.
- No other carcinogenic air contaminants beyond those listed in Condition #14 of the HRA were detected in effluent above 10 ppbv, and therefore per Condition #16, no toxic risk assessment was required.

We also evaluated all the analytical and PID data and, based on our professional judgement, we do not recommend a voluntary changeout of the lead vessel GAC at this time.

OU-1 SVE GAC Assessment – Based on Samples Collected April 7, 2020					
Parameter	Concentration (ppbv)				Below 2015 HRA Limit?
	Influent	Midpoint	Effluent	HRA Effluent Limit	
1,1,1-Trichloroethane (TCA)	1.6	1.5	ND	34	Yes
1,1-Dichloroethane	ND	ND	ND	15	Yes
1,1-Dichloroethene	2.7	3.6	3.7	1,243	Yes
1,2-Dichloroethane	ND	ND	ND	14	Yes
Benzene	ND	ND	ND	65	Yes
Carbon disulfide	ND	ND	ND	1,007	Yes
Chloroform	ND	ND	ND	48	Yes
Freon 11	1.4	1.8	2.1	1,801	Yes
Freon 113	5.6	5.1	4.1	9,799	Yes
Freon 12	ND	ND	ND	775	Yes
Isopropyl Alcohol (Isopropanol)	ND	ND	ND	60	Yes
Methyl ethyl ketone	6.8	ND	5	75	Yes
Methylene chloride	ND	ND	ND	1,082	Yes

o-Xylene	ND	ND	ND	21	Yes
Tetrachloroethene (PCE)	52	ND	ND	2,208	Yes
TNMOC ref. to Heptane (MW=100)	370	35	47	17,405	Yes
Toluene	ND	ND	ND	47	Yes
Trichloroethene (TCE)	4.8	ND	ND	198	Yes
Vinyl chloride	ND	ND	ND	84	Yes

Please let us know if you have any questions or wish to discuss these data further.

Maria Day

CDM Smith

555 17th St., Suite 500, Denver, CO 80202

Office: 303.383.2380

Cell: 303.913.8864

dayml@cdmsmith.com

Kyle King

From: Day, Maria L. <dayml@cdmsmith.com>
Sent: Thursday, July 16, 2020 12:00 PM
To: Laura Millan; Kyle King
Cc: Reed, Alesandra F.; Bamer, Jeffrey
Subject: Omega OU-1 SVE GAC Assessment May 2020
Attachments: Omega OU-1 SVE GAC Changeout Assessment_May 2020 .xlsx

**** WARNING EXTERNAL SENDER ****

Team,

We evaluated the performance of the GAC used by the OU-1 SVE system for the month of May 2020, relative to the conditions listed in the Health Risk Assessment (HRA) (CDM Smith 2015). These conditions must be met to remain in substantive compliance with SCAQMD requirements.

During the month of May, the OU-1 SVE system did not meet the conditions presented in the HRA and is therefore substantively compliant:

- None of the toxic air contaminants listed in Condition #14 of the HRA were detected in the effluent above their respective effluent limit.
- On May 29th the effluent PID limit was exceeded; the system was temporarily shut down until results of a repeat effluent sample confirmed that the PID reading was inaccurate. The OU-1 SVE system did not meet the two criteria for replacement of the lead GAC vessel (listed under Condition #12 of the HRA), and therefore no GAC replacement was required.
- No other carcinogenic air contaminants beyond those listed in Condition #14 of the HRA were detected in effluent above 10 ppbv, and therefore per Condition #16, no toxic risk assessment was required.

We also evaluated all the analytical and PID data and, based on our professional judgement, we do not recommend a voluntary changeout of the lead vessel GAC at this time.

OU-1 SVE GAC Assessment – Based on Samples Collected May 8, 2020					
Parameter	Concentration (ppbv)				Below 2015 HRA Limit?
	Influent	Midpoint	Effluent	HRA Effluent Limit	
1,1,1-Trichloroethane (TCA)	1.9	ND	ND	34	Yes
1,1-Dichloroethane	ND	ND	ND	15	Yes
1,1-Dichloroethene	2.3	2.7	2.2	1,243	Yes
1,2-Dichloroethane	ND	ND	ND	14	Yes
Benzene	ND	ND	ND	65	Yes
Carbon disulfide	ND	ND	ND	1,007	Yes
Chloroform	ND	ND	ND	48	Yes
Freon 11	1.4	1.5	1.1	1,801	Yes
Freon 113	4.8	3.4	1.1	9,799	Yes
Freon 12	ND	ND	ND	775	Yes
Isopropyl Alcohol (Isopropanol)	ND	ND	ND	60	Yes

Methyl ethyl ketone	ND	6.3	7.2	75	Yes
Methylene chloride	ND	ND	ND	1,082	Yes
o-Xylene	ND	ND	ND	21	Yes
Tetrachloroethene (PCE)	60	ND	ND	2,208	Yes
TNMOC ref. to Heptane (MW=100)	550	74	54	17,405	Yes
Toluene	ND	ND	ND	47	Yes
Trichloroethene (TCE)	5.3	ND	1.1	198	Yes
Vinyl chloride	ND	ND	ND	84	Yes

We have attached the original spreadsheet. Please let us know if there are any questions or if you would like to discuss the data further. Have a great day.

Maria Day

CDM Smith

555 17th St., Suite 500, Denver, CO 80202

Office: 303.383.2380

Cell: 303.913.8864

dayml@cdmsmith.com

Kyle King

From: Day, Maria L. <dayml@cdmsmith.com>
Sent: Thursday, July 16, 2020 11:58 AM
To: Kyle King; Laura Millan
Cc: Bamer, Jeffrey; Reed, Alesandra F.
Subject: Omega OU-1 SVE GAC Assessment June 2020
Attachments: Omega OU-1 SVE GAC Changeout Assessment_June 2020.xlsx

**** WARNING EXTERNAL SENDER ****

Team,

We evaluated the performance of the GAC used by the OU-1 SVE system for the month of June 2020, relative to the conditions listed in the Health Risk Assessment (HRA) (CDM Smith 2015). These conditions must be met to remain in substantive compliance with SCAQMD requirements.

During the month of June, the OU-1 SVE system did not meet the conditions presented in the HRA and is therefore substantively compliant:

- None of the toxic air contaminants listed in Condition #14 of the HRA were detected in the effluent above their respective effluent limit.
- The OU-1 SVE system did not meet the two criteria for replacement of the lead GAC vessel (listed under Condition #12 of the HRA), and therefore no GAC replacement was required.
- No other carcinogenic air contaminants beyond those listed in Condition #14 of the HRA were detected in effluent above 10 ppbv, and therefore per Condition #16, no toxic risk assessment was required.

We also evaluated all the analytical and PID data and, based on our professional judgement, we do not recommend a voluntary changeout of the lead vessel GAC at this time.

OU-1 SVE GAC Assessment – Based on Samples Collected June 12, 2020					
Parameter	Concentration (ppbv)				Below 2015 HRA Limit?
	Influent	Midpoint	Effluent	HRA Effluent Limit	
1,1,1-Trichloroethane (TCA)	3.1	1.4	ND	34	Yes
1,1-Dichloroethane	ND	ND	ND	15	Yes
1,1-Dichloroethene	3.3	3	2.7	1,243	Yes
1,2-Dichloroethane	ND	ND	ND	14	Yes
Benzene	ND	ND	ND	65	Yes
Carbon disulfide	ND	ND	ND	1,007	Yes
Chloroform	ND	ND	ND	48	Yes
Freon 11	ND	1.8	ND	1,801	Yes
Freon 113	4.2	3.5	ND	9,799	Yes
Freon 12	ND	ND	ND	775	Yes
Isopropyl Alcohol (Isopropanol)	5.9	8.5	9.9	60	Yes
Methyl ethyl ketone	25	75	62	75	Yes
Methylene chloride	ND	ND	ND	1,082	Yes

o-Xylene	ND	ND	ND	21	Yes
Tetrachloroethene (PCE)	52	ND	27	2,208	Yes
TNMOC ref. to Heptane (MW=100)	320	190	280	17,405	Yes
Toluene	ND	ND	ND	47	Yes
Trichloroethene (TCE)	5	ND	5.4	198	Yes
Vinyl chloride	ND	ND	ND	84	Yes

If you have any questions or would like to discuss the data please feel free to reach out. Have a great day.

Maria Day

CDM Smith

555 17th St., Suite 500, Denver, CO 80202

Office: 303.383.2380

Cell: 303.913.8864

dayml@cdmsmith.com

ATTACHMENT B

Summary of VEW and DPE Concentrations and Operational Data

Attachment B, Table B-1
VEW / DPE Quarterly Operational Summary and Calculated Mass Removed
OU-1 Full Scale On-Site Soil Remedy, Omega Chemical Superfund Site
Second Quarter 2020

Location	Measurement Date	Shallow / Deep	Flow (SCFM)	PID (ppmv)	Analytical Total VOCs ² (ug/m3)	Temperature (deg. F)	Vacuum (in H ₂ O, gauge)	Relative Humidity (%)	Calculated Mass Removed ¹ (lbs)
VE-1S	4/7/2020	SHALLOW	21.0	0.0	--	72.8	-20.0	50.9	--
	5/8/2020	SHALLOW	16.0	0.0		82.9	-14.0	50.5	
	6/12/2020	SHALLOW	16.0	1.5		85.4	-18.0	45.5	
VE-5S	4/7/2020	SHALLOW	--	0.0	--	73.1	-70.0	49.3	--
	5/8/2020	SHALLOW	24.0	0.0		85.1	-40.0	45.2	
	6/12/2020	SHALLOW	26.0	1.1		87.8	-64.0	42.4	
VE-6S	4/7/2020	SHALLOW	72.0	0.0	--	72.1	-30.0	48.9	--
	5/8/2020	SHALLOW	69.0	0.0		84.2	-20.0	52.9	
	6/12/2020	SHALLOW	64.0	1.0		87.2	-24.0	45.7	
VE-8S	4/7/2020	SHALLOW	144.0	0.0	--	73.5	-47.0	47.9	--
	5/8/2020	SHALLOW	166.0	0.0		85.1	-41.0	44.9	
	6/12/2020	SHALLOW	103.0	1.4		87.3	-41.0	42.5	
VE-9S	4/7/2020	SHALLOW	29.0	0.0	--	71.3	-46.0	52.2	--
	5/8/2020	SHALLOW	51.0	0.0		84.0	-41.0	46.2	
	6/12/2020	SHALLOW	34.0	2.6		86.5	-41.0	42.2	
VE-10S	4/7/2020	SHALLOW	31.0	0.0	--	74.1	-42.0	51.9	--
	5/8/2020	SHALLOW	27.0	0.0		83.7	-40.0	48.5	
	6/12/2020	SHALLOW	26.0	1.3		86.8	-40.0	45.4	
VE-11S	4/7/2020	SHALLOW	85.0	0.0	--	73.6	-37.0	47.0	--
	5/8/2020	SHALLOW	91.0	0.0		84.4	-31.0	47.1	
	6/12/2020	SHALLOW	97.0	1.0		86.9	-32.0	43.4	
VE-12S	4/7/2020	SHALLOW	26.0	0.0	--	73.9	-40.0	51.6	--
	5/8/2020	SHALLOW	30.0	0.0		83.4	-32.0	49.6	
	6/12/2020	SHALLOW	33.0	1.0		86.0	-32.0	45.6	
VE-14S	4/7/2020	SHALLOW	--	0.0	--	72.5	-20.0	51.1	--
	4/13/2020	SHALLOW	50.0	0.2		63.5	-22.0	83.4	
	5/8/2020	SHALLOW	--	0.0		84.3	-20.0	47.9	
	5/15/2020	SHALLOW	149.0	0.4		73.2	-17.0	63.6	
	6/12/2020	SHALLOW	38.0	0.6		86.8	-12.0	47.9	
	6/19/2020	SHALLOW	36.0	1.0		76.5	-20.0	55.8	
VE-15S	4/7/2020	SHALLOW	25.0	0.0	--	72.5	-32.0	56.0	--
	4/13/2020	SHALLOW	--	0.2		61.5	-38.0	78.9	
	5/8/2020	SHALLOW	--	0.0		84.1	-32.0	44.2	
	5/15/2020	SHALLOW	32.0	0.2		73.4	-34.0	62.6	
	6/12/2020	SHALLOW	22.0	2.5		85.3	-32.0	45.7	
	6/19/2020	SHALLOW	30.0	0.7		76.8	-33.0	55.8	

Attachment B, Table B-1
VEW / DPE Quarterly Operational Summary and Calculated Mass Removed
OU-1 Full Scale On-Site Soil Remedy, Omega Chemical Superfund Site
Second Quarter 2020

Location	Measurement Date	Shallow / Deep	Flow (SCFM)	PID (ppmv)	Analytical Total VOCs ² (ug/m3)	Temperature (deg. F)	Vacuum (in H ₂ O, gauge)	Relative Humidity (%)	Calculated Mass Removed ¹ (lbs)
DPE-3	4/7/2020	DEEP	112.0	0.0	--	71.4	-40.0	60.7	--
	5/8/2020	DEEP	102.0	0.0		83.3	-40.0	45.8	
	6/12/2020	DEEP	111.0	2.1		86.0	-38.0	43.0	
DPE-4	4/7/2020	DEEP	92.0	0.0	--	69.3	-28.0	63.5	--
	5/8/2020	DEEP	94.0	0.0		82.6	-24.0	49.7	
	6/12/2020	DEEP	92.0	4.6		85.6	-22.0	47.4	
DPE-5	4/7/2020	DEEP	105.0	0.0	--	65.1	-48.0	65.7	--
	5/8/2020	DEEP	105.0	0.0		82.6	-40.0	49.2	
	6/12/2020	DEEP	109.0	4.2		86.8	-42.0	40.3	
DPE-8	4/7/2020	DEEP	81.0	0.0	--	63.1	-30.0	76.1	--
	5/8/2020	DEEP	82.0	0.0		82.5	-30.0	47.4	
	6/12/2020	DEEP	86.0	6.4		85.7	-28.0	44.2	
DPE-9	4/7/2020	DEEP	63.0	0.0	--	63.1	-36.0	69.9	--
	5/8/2020	DEEP	77.0	0.0		81.6	-34.0	57.5	
	6/12/2020	DEEP	83.0	3.9		85.5	-32.0	47.1	
VE-2D	4/7/2020	DEEP	24.0	5.3	--	72.6	-32.0	51.9	--
	5/8/2020	DEEP	19.0	6.4		84.7	-29.3	46.2	
	6/12/2020	DEEP	63.0	6.7		87.8	-24.0	39.6	
VE-14D	4/7/2020	DEEP	81.0	0.0	--	66.7	-28.0	66.8	--
	5/8/2020	DEEP	83.0	0.0		82.6	-20.0	51.6	
	6/12/2020	DEEP	86.0	3.5		85.9	-24.0	42.1	

Notes:

DPE = dual phase extraction

ppmv = parts per million by volume

VOC = volatile organic compound

F = Fahrenheit

SCFM = standard cubic feet per minute

Shallow = between 0 and 30 feet below ground surface

lbs = pounds

ug/m3 = micrograms per liter

Deep = between approximately 30 and 100 feet below ground surface

PID = photoionization detector

VE = vapor extraction

-- = Not measured

in H₂O, gauge = inches of water pressure, relative to atmospheric pressure; a negative gauge pressure is considered vacuum

1. Calculations are based on a subset of total VOC data from laboratory analyses of vapor samples, when collected, and measured flow rates from individual VEWs and the total system influent. Mass calculations are rounded to nearest 0.1 pound. If less than 0.05 pounds were calculated for the period, this will show as 0.0 pounds. VOCs that are not detected above the RLs are not included in the mass calculation. VEWs are not required to be sampled each quarter. If VEWs are sampled, it is based on operational considerations and to assist in mass calculations. All VEWs are sampled once per year.

2. A subset of VOC data used in mass removed calculations. TVOC concentrations are calculated using the detected concentrations from the following compounds: Tetrachloroethene (PCE), Trichloroethene (TCE), 1,1-Dichloroethene, Vinyl chloride, 1,1,1-Trichloroethane (TCA), 1,1-Dichloroethane, 1,2-Dichloroethane, Chloroform, Methylene chloride, Freon 11, Freon 12, Freon 113, Benzene, Toluene, o-Xylene, Carbon disulfide, Methyl ethyl ketone, Isopropyl Alcohol (Isopropanol), which account for approximately 98% of compounds in the data stream. No samples collected this quarter.

3. Only VE and DPE wells connected to the OU-1 SVE System are presented.

ATTACHMENT C

Summary of Vapor Monitoring Probe Concentrations and Vacuum

Attachment C, Table C-1
Shallow Vapor Monitoring Probe Vacuum Summary
OU-1 Full Scale On-Site Soil Remedy, Omega Chemical Superfund Site
Second Quarter 2020

Location	Monitoring Point Depth (feet bgs)	Vapor Extraction Well ROI ¹	Measurement Date	Vacuum ^{2,3} (in H ₂ O, gauge)
VE-1M	36 ⁴	VE-1S, VE-5S	4/27/2020	-0.71
VE-2S	22	VE-1S, VE-5S	4/27/2020	-0.20
VE-4S	22	VE-1S, VE-5S	4/27/2020	-0.39
VE-5M	36 ⁴	VE-5S	4/27/2020	-1.08
VE-7S	30	VE-8S	4/24/2020	-0.43
VMP-11	30	VE-10S, VE-12S	4/21/2020	-0.65
VMP-12	30	VE-10S, VE-11S	4/21/2020	-1.45
VMP-13	30	VE-31S	4/21/2020	-0.61
VMP-14	30		4/23/2020	-0.06
VMP-15	30	VE-10S, VE-9S	4/21/2020	-0.93
VMP-16	30	VE-11S	4/21/2020	-1.21
VMP-17	30		4/21/2020	-1.62
VMP-18	30	VE-15S	4/23/2020	-0.02
VMP-20	30	VE-5S, VE-8S	4/27/2020	-0.60
VMP-21	30	VE-15S	4/27/2020	-0.12
VMP-22	30		4/24/2020	-0.60
VMP-23	30		4/23/2020	-0.02
VMP-24	30		4/23/2020	-0.08
VMP-25	30		4/23/2020	-0.01
VMP-26	30	VE-14S	4/27/2020	-0.09
VMP-27	30	VE-14S	4/27/2020	0.00
VMP-31	6	VE-21S	4/24/2020	-0.04
	12	VE-21S	4/24/2020	-0.01
	24	VE-21S	4/24/2020	-0.10
VMP-32	6	VE-39S	4/24/2020	-0.05
	12	VE-39S	4/24/2020	-0.06
	24	VE-39S	4/24/2020	-0.08
VMP-43	6	VE-31S	4/23/2020	-0.65
	12	VE-31S	4/23/2020	-0.64
	24	VE-31S	4/23/2020	-0.69
VMP-94	6	VE-31S	4/23/2020	-0.26
	12	VE-31S	4/23/2020	-0.31
	24	VE-31S	4/23/2020	-0.46

Notes:

bgs = below ground surface

1. ROI = Estimated design radius of influence by the vapor extraction well (VEW) listed. If no VEW is listed, then the VMP is not within the design ROI of a VEW.

2. in H₂O, gauge = inches of water pressure relative to atmospheric pressure. A negative gauge pressure is considered vacuum.

3. Yellow highlighted cells indicate a VMP within the design ROI of a VEW that did not meet the target vacuum of -0.1 in H₂O at the time the monitoring was conducted.

4. These wells are considered part of shallow vapor monitoring as their well screen intervals are 26 - 36 feet below ground surface.

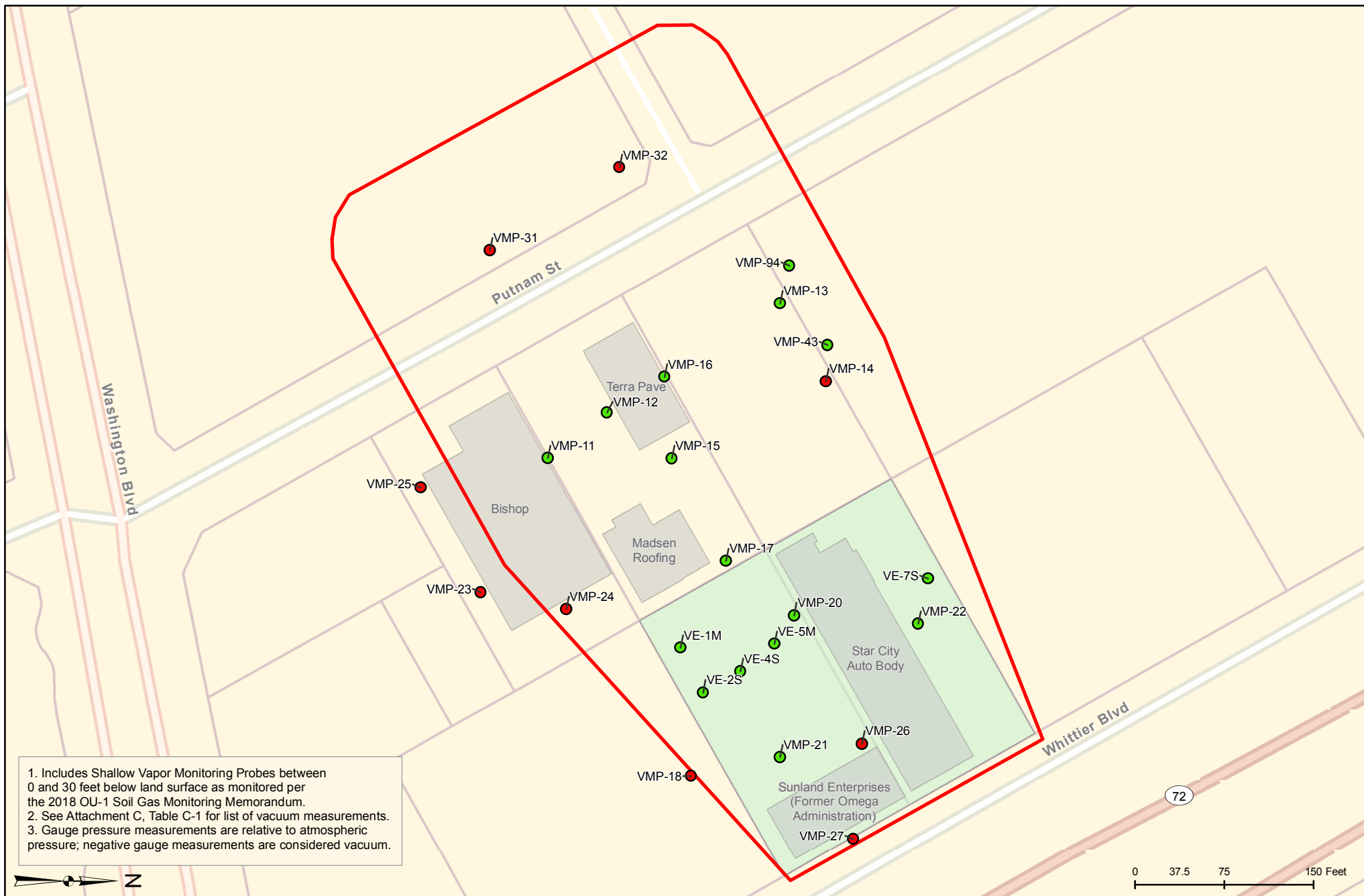
Attachment C, Table C-2
Deep Vapor Monitoring Probe Vacuum Summary
OU-1 Full Scale On-Site Soil Remedy, Omega Chemical Superfund Site
Second Quarter 2020

Location	Monitoring Point Depth (feet bgs)	Vapor Extraction Well ROI ¹	Measurement Date	Vacuum ^{2,3} (in H ₂ O, gauge)
VMP-1D	70	DPE-8	4/27/2020	-1.15
VMP-3D	70	VE-2D	4/27/2020	-0.99
VMP-4D	70	DPE-3, VE-2D	4/27/2020	-2.37
VMP-5	45	VE-2D	4/24/2020	-0.38
VMP-31	40	VE-6D	4/24/2020	0.00
	55	VE-6D	4/24/2020	-0.26
	60	VE-6D	4/24/2020	-0.12
	70	VE-6D	4/24/2020	-0.02
VMP-32	40	VE-10D	4/24/2020	-0.31
	55	VE-10D	4/24/2020	-0.32
	60	VE-10D	4/24/2020	-0.09
	70	VE-10D	4/24/2020	-0.02
VMP-92	50	DPE-5	4/21/2020	0.00
	60	DPE-5	4/21/2020	-0.09
	70	DPE-5	4/21/2020	-0.31
VMP-93	50		4/21/2020	-1.51
	60		4/21/2020	-1.73
	70		4/21/2020	-0.01
VMP-94	40	DPE-4, VE-14D	4/23/2020	-0.53
	50	DPE-4, VE-14D	4/23/2020	-0.68
	60	DPE-4, VE-14D	4/23/2020	-1.91
	70	DPE-4, VE-14D	4/23/2020	-1.40
VMP-95	50		4/23/2020	-2.61
	60		4/23/2020	-1.02
	70		4/23/2020	-1.59

Notes:

bgs = below ground surface

1. ROI = Estimated design radius of influence by the vapor extraction well (VEW) listed. If no VEW is listed, then the VMP is not within the design ROI of a VEW.
2. in H₂O, gauge = inches of water pressure relative to atmospheric pressure. A negative gauge pressure is considered vacuum.
3. Yellow highlighted cells indicate a VMP within the design ROI of a VEW that did not meet the target vacuum of -0.1 in H₂O at the time the monitoring was conducted.



Vacuum

- < -0.1 in H₂O (gauge) at all depths
- > -0.1 in H₂O (gauge) at some depths
- > -0.1 in H₂O (gauge) at all depths
- no vacuum data available

- OU-1 Boundary
- Building Currently Commercially/Industrially Occupied
- Building Currently Vacant
- Former Omega Chemical Property Boundary



Reviewed By: LM
 Drawn By: KM
 Date: 7/28/2020

Attachment C, Figure C-1
Vacuum Influence at
Shallow Vapor Monitoring Probes
OU-1 Full Scale On-Site Soil Remedy,
Omega Chemical Superfund Site
Second Quarter 2020



Vacuum

- achieves target vacuum at all depths
- achieves target vacuum at some depths
- does not achieve target vacuum
- no vacuum data available

- OU-1 Boundary
- Building Currently Commercially/Industrially Occupied
- Building Currently Vacant
- Former Omega Chemical Property Boundary



Reviewed By: LM
Drawn By: KM
Date: 7/28/2020

**Attachment C, Figure C-2
Vacuum Influence at
Deep Vapor Monitoring Probes
OU-1 Full Scale On-Site Soil Remedy,
Omega Chemical Superfund Site
Second Quarter 2020**

ATTACHMENT D

Other Soil Gas Collected this Quarter

(Not Included this Quarter)

ATTACHMENT E

Field Forms

VAPOR PROBE MONITORING FORM

Omega - VMP Monitoring

Date: 4/21, 4/23, 4/24, 4/27

Technician: K. Schor, P. Rucka

WELL ID	Depth (ft bgs)	Well Diameter (inches)	Purge Time/Volume (min)/(Liters)	Flow Rate (mL/min)	Vacuum Exerted ("Hg) <7.36"Hg	Date	Time	Observed Vacuum ("H ₂ O)	Sample Taken? (Y/N)	Notes ¹
BISHOP CO. 12519 Putnam St, Whittier, CA										
VMP-23	31.5	4				4/23/20	1232	-0.015	N	
VMP-24	31.5	4				"	1232	-0.081	N	
VMP-25	31.5	4				"	1234	-0.007	N	
KAISER PERMANENTE MEDICAL OFFICES 12470 Whittier Blvd, Whittier, CA										
VMP-40-6	6	0.25						NM	N	
VMP-40-12	12	0.25						NM	N	
VMP-40-24	24	0.25						NM	N	
VMP-40-55	55	1						NM	N	
VMP-40-70	70	0.25						NM	N	
VMP-41-6	6	0.25						NM	N	
VMP-41-12	12	0.25						NM	N	
VMP-41-24	24	0.25						NM	N	
VMP-41-55	55	1						NM	N	
VMP-43-6	6	0.25				4/23/20	1205	-0.653	N	
VMP-43-12	12	0.25					1207	-0.635	N	
VMP-43-24	24	0.25					1208	-0.691	N	
VMP-94-6	6	0.25					1153	-0.261	N	
VMP-94-11	11	0.25					1155	-0.314	N	
VMP-94-24	24	0.25					1157	-0.456	N	
VMP-94-40	40	0.25					1158	-0.527	N	
VMP-94-50	50	0.25					1159	-0.684	N	
VMP-94-60	60	0.25					1200	-1.908	N	
VMP-94-69.5	69.5	0.25					1202	-1.398	N	

VMP-95-51	51	0.25				4/23/20	1213	-2.20	N	-2.614
VMP-95-60	61	0.25				"	1215	-1.016	N	
VMP-95-69.5	69.5	0.25				"	1217	-1.592	N	
ROP AND WCCS (FORMER) 12519 Washington Blvd, Whittier, CA										
VMP-31-6	6	0.25				4/24/20	0748	-0.040	N	
VMP-31-12	12	0.25					0750	-0.009	N	
VMP-31-24	24	0.25					0751	-0.095	N	
VMP-31-40	40	0.25					0755	-0.0	N	positive pressure
VMP-31-55	55	1					0753	-0.258	N	
VMP-31-60	60	0.25					0756	-0.115	N	
VMP-31-70	70	0.25					0757	-0.022	N	
VMP-32-6	6	0.25					0800	-0.047	N	
VMP-32-12	12	0.25					0801	-0.064	N	
VMP-32-24	24	0.25					0802	-0.081	N	
VMP-32-40	40	0.25					0805	-0.311	N	
VMP-32-55	55	1					0803	-0.318	N	
VMP-32-60	60	0.25					0806	-0.091	N	
VMP-32-70	70	0.25					0807	-0.019	N	
SKATELAND (FORMER) 12520 Whittier Blvd, Whittier, CA										
VMP-18	30	4				4/23/20	1254	-0.023	N	
VMP-39-6	6	0.25						NM	N	
VMP-39-12	12	0.25						NM	N	
VMP-39-24	24	0.25						NM	N	
VMP-39-55	55	1						NM	N	
VMP-84-6	6	0.25						NM	N	
VMP-84-12	12	0.25						NM	N	
VMP-84-24	24	0.25						NM	N	
VMP-84-40	40	0.25						NM	N	
VMP-84-50	50	0.25						NM	N	
VMP-84-60	60	0.25						NM	N	
STAR CITY AUTO BODY 12504 Whittier Blvd, Whittier, CA										
VMP-5	45	1				4/24/20	1308	-0.382	N	

VMP-22	31.5	4				4/24/20	1304	-0.597	N	
TERRA PAVE 12511 Putnam St, Whittier, CA										
VMP-11	30	4				4/21/20	1011	-0.653	N	
VMP-12	31.5	4				4/21/20	1016	-1.451	N	
VMP-13	31.5	4				4/21/20	1047	-0.605	N	
VMP-14	31.5	4				4/23/20	1107	-0.060	N	
VMP-15	31.5	4				4/21/20	1013	-0.929	N	
VMP-16	31.5	4				4/21/20	1044	-1.213	N	
VMP-17	31.5	4				4/21/20	1008	-1.624	N	
VMP-92-51.5	51.5	0.25				4/21/20	1024	Ø	N	
VMP-92-60	62	0.25				4/21/20	1025	-0.090	N	
VMP-92-68.5	70	0.25				4/21/20	1026	Ø	N	-0.314
VMP-93-50	50	0.25				4/21/20	1031	-1.513	N	
VMP-93-60	60	0.25				4/21/20	1036	-1.730	N	
VMP-93-69.5	69.5	0.25				4/21/20	1038	-0.007	N	
THREE KINGS CONSTRUCTION (FORMER) 12512 Whittier Blvd, Whittier, CA										
VE-1M	36	4				4/27/20	0750	-0.708	N	
VE-2S	22	4					0752	-0.196	N	
VE-4S	22	4					0748	-0.394	N	
VE-5M	36	4					0744	-1.079	N	
VE-7S	30	4					0816	-0.428	N	
VMP-1D	70	4					0746	-1.154	N	
VMP-3D	70	4					0822	-0.992	N	
VMP-4D	70	4					0819	-2.365	N	
VMP-20	31.5	4					0742	-0.604	N	
VMP-21	31.5	4					0754	-0.124	N	
VMP-26	30.5	4					0758	-0.087	N	
VMP-27	30	4					0805	-0.002	N	

ATTACHMENT F

Laboratory Analytical Results

4/16/2020

Ms. Jaime Dinello

DeMaximis, Inc

1340 Reynolds Ave, Suite 105

Irvine CA 92614

Project Name: Omega - OU1 SVE Monthly GAC Sampling

Project #:

Workorder #: 2004173

Dear Ms. Jaime Dinello

The following report includes the data for the above referenced project for sample(s) received on 4/9/2020 at Air Toxics Ltd.

The data and associated QC analyzed by TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics Inc. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Kelly Buettner at 916-985-1000 if you have any questions regarding the data in this report.

Regards,



Kelly Buettner

Project Manager

WORK ORDER #: 2004173

Work Order Summary

CLIENT:	Ms. Jaime Dinello DeMaximis, Inc 1340 Reynolds Ave, Suite 105 Irvine, CA 92614	BILL TO:	Mr. Tom Dorsey Omega Chemical Site Environmental Remediation Trust 1322 Scott St. Suite 104
PHONE:	949.679.9290	P.O. #	
FAX:	949.679.9078	PROJECT #	Omega - OU1 SVE Monthly GAC
DATE RECEIVED:	04/09/2020	CONTACT:	Sampling Kelly Buettner
DATE COMPLETED:	04/16/2020		

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>	<u>RECEIPT VAC./PRES.</u>	<u>FINAL PRESSURE</u>
01A	OC_SVE_EFF_GAC_040720	TO-15	5.0 "Hg	15 psi
02A	OC_SVE_MID_GAC_040720	TO-15	5.0 "Hg	15 psi
03A	OC_SVE_INF_GAC_040720	TO-15	5.5 "Hg	15 psi
04A	Lab Blank	TO-15	NA	NA
05A	CCV	TO-15	NA	NA
06A	LCS	TO-15	NA	NA
06AA	LCSD	TO-15	NA	NA

CERTIFIED BY:



Technical Director

DATE: 04/16/20

Certification numbers: AZ Licensure AZ0775, FL NELAP – E87680, LA NELAP – 02089, NH NELAP - 209218, NJ NELAP - CA016, NY NELAP - 11291, TX NELAP - T104704434-18-13, UT NELAP – CA009332019-11, VA NELAP - 460197, WA NELAP - C935

Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)

Accreditation number: CA300005-011, Effective date: 10/18/2019, Expiration date: 10/17/2020.

Eurofins Air Toxics, LLC certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Eurofins Air Toxics, LLC.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630

(916) 985-1000 . (800) 985-5955 . FAX (916) 351-8279

LABORATORY NARRATIVE
EPA Method TO-15
DeMaximis, Inc
Workorder# 2004173

Three 1 Liter Summa Canister samples were received on April 09, 2020. The laboratory performed analysis via EPA Method TO-15 using GC/MS in the full scan mode.

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

The TNMOC concentration was calculated by taking the total area counts in the sample and quantitating the area based on the response factor of TNMOC ref. to Heptane (MW=100).

Definition of Data Qualifying Flags

Ten qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

M - Reported value may be biased due to apparent matrix interferences.

CN - See Case Narrative.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

Summary of Detected Compounds EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: OC_SVE_EFF_GAC_040720

Lab ID#: 2004173-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 11	1.2	2.1	6.8	12
Freon 113	1.2	4.1	9.3	31
1,1-Dichloroethene	1.2	3.7	4.8	15
2-Butanone (Methyl Ethyl Ketone)	4.8	5.0	14	15
TNMOC ref. to Heptane (MW=100)	24	47	99	190

Client Sample ID: OC_SVE_MID_GAC_040720

Lab ID#: 2004173-02A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 11	1.2	1.8	6.8	9.8
Freon 113	1.2	5.1	9.3	39
1,1-Dichloroethene	1.2	3.6	4.8	14
1,1,1-Trichloroethane	1.2	1.5	6.6	8.1
TNMOC ref. to Heptane (MW=100)	24	35	99	140

Client Sample ID: OC_SVE_INF_GAC_040720

Lab ID#: 2004173-03A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 11	1.2	1.4	6.9	8.0
Freon 113	1.2	5.6	9.5	43
1,1-Dichloroethene	1.2	2.7	4.9	10
2-Butanone (Methyl Ethyl Ketone)	4.9	6.8	14	20
1,1,1-Trichloroethane	1.2	1.6	6.7	8.9
Trichloroethene	1.2	4.8	6.6	26
Tetrachloroethene	1.2	52	8.4	350
TNMOC ref. to Heptane (MW=100)	25	370	100	1500



Air Toxics

Client Sample ID: OC_SVE_EFF_GAC_040720

Lab ID#: 2004173-01A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	p041309	Date of Collection:	4/7/20 8:42:00 AM
Dil. Factor:	2.42	Date of Analysis:	4/13/20 02:43 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	1.2	Not Detected	6.0	Not Detected
Vinyl Chloride	1.2	Not Detected	3.1	Not Detected
Freon 11	1.2	2.1	6.8	12
Freon 113	1.2	4.1	9.3	31
1,1-Dichloroethene	1.2	3.7	4.8	15
2-Propanol	4.8	Not Detected	12	Not Detected
Carbon Disulfide	4.8	Not Detected	15	Not Detected
Methylene Chloride	12	Not Detected	42	Not Detected
Hexane	1.2	Not Detected	4.3	Not Detected
1,1-Dichloroethane	1.2	Not Detected	4.9	Not Detected
2-Butanone (Methyl Ethyl Ketone)	4.8	5.0	14	15
Chloroform	1.2	Not Detected	5.9	Not Detected
1,1,1-Trichloroethane	1.2	Not Detected	6.6	Not Detected
Carbon Tetrachloride	1.2	Not Detected	7.6	Not Detected
Benzene	1.2	Not Detected	3.9	Not Detected
1,2-Dichloroethane	1.2	Not Detected	4.9	Not Detected
Trichloroethene	1.2	Not Detected	6.5	Not Detected
1,4-Dioxane	4.8	Not Detected	17	Not Detected
Toluene	1.2	Not Detected	4.6	Not Detected
1,1,2-Trichloroethane	1.2	Not Detected	6.6	Not Detected
Tetrachloroethene	1.2	Not Detected	8.2	Not Detected
o-Xylene	1.2	Not Detected	5.2	Not Detected
TNMOC ref. to Heptane (MW=100)	24	47	99	190

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	96	70-130
1,2-Dichloroethane-d4	97	70-130
4-Bromofluorobenzene	99	70-130



Air Toxics

Client Sample ID: OC_SVE_MID_GAC_040720

Lab ID#: 2004173-02A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	p041310	Date of Collection:	4/7/20 8:49:00 AM
Dil. Factor:	2.42	Date of Analysis:	4/13/20 03:13 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	1.2	Not Detected	6.0	Not Detected
Vinyl Chloride	1.2	Not Detected	3.1	Not Detected
Freon 11	1.2	1.8	6.8	9.8
Freon 113	1.2	5.1	9.3	39
1,1-Dichloroethene	1.2	3.6	4.8	14
2-Propanol	4.8	Not Detected	12	Not Detected
Carbon Disulfide	4.8	Not Detected	15	Not Detected
Methylene Chloride	12	Not Detected	42	Not Detected
Hexane	1.2	Not Detected	4.3	Not Detected
1,1-Dichloroethane	1.2	Not Detected	4.9	Not Detected
2-Butanone (Methyl Ethyl Ketone)	4.8	Not Detected	14	Not Detected
Chloroform	1.2	Not Detected	5.9	Not Detected
1,1,1-Trichloroethane	1.2	1.5	6.6	8.1
Carbon Tetrachloride	1.2	Not Detected	7.6	Not Detected
Benzene	1.2	Not Detected	3.9	Not Detected
1,2-Dichloroethane	1.2	Not Detected	4.9	Not Detected
Trichloroethene	1.2	Not Detected	6.5	Not Detected
1,4-Dioxane	4.8	Not Detected	17	Not Detected
Toluene	1.2	Not Detected	4.6	Not Detected
1,1,2-Trichloroethane	1.2	Not Detected	6.6	Not Detected
Tetrachloroethene	1.2	Not Detected	8.2	Not Detected
o-Xylene	1.2	Not Detected	5.2	Not Detected
TNMOC ref. to Heptane (MW=100)	24	35	99	140

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	95	70-130
1,2-Dichloroethane-d4	99	70-130
4-Bromofluorobenzene	99	70-130



Air Toxics

Client Sample ID: OC_SVE_INF_GAC_040720

Lab ID#: 2004173-03A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	p041311	Date of Collection:	4/7/20 8:54:00 AM
Dil. Factor:	2.47	Date of Analysis:	4/13/20 03:42 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	1.2	Not Detected	6.1	Not Detected
Vinyl Chloride	1.2	Not Detected	3.2	Not Detected
Freon 11	1.2	1.4	6.9	8.0
Freon 113	1.2	5.6	9.5	43
1,1-Dichloroethene	1.2	2.7	4.9	10
2-Propanol	4.9	Not Detected	12	Not Detected
Carbon Disulfide	4.9	Not Detected	15	Not Detected
Methylene Chloride	12	Not Detected	43	Not Detected
Hexane	1.2	Not Detected	4.4	Not Detected
1,1-Dichloroethane	1.2	Not Detected	5.0	Not Detected
2-Butanone (Methyl Ethyl Ketone)	4.9	6.8	14	20
Chloroform	1.2	Not Detected	6.0	Not Detected
1,1,1-Trichloroethane	1.2	1.6	6.7	8.9
Carbon Tetrachloride	1.2	Not Detected	7.8	Not Detected
Benzene	1.2	Not Detected	3.9	Not Detected
1,2-Dichloroethane	1.2	Not Detected	5.0	Not Detected
Trichloroethene	1.2	4.8	6.6	26
1,4-Dioxane	4.9	Not Detected	18	Not Detected
Toluene	1.2	Not Detected	4.6	Not Detected
1,1,2-Trichloroethane	1.2	Not Detected	6.7	Not Detected
Tetrachloroethene	1.2	52	8.4	350
o-Xylene	1.2	Not Detected	5.4	Not Detected
TNMOC ref. to Heptane (MW=100)	25	370	100	1500

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	96	70-130
1,2-Dichloroethane-d4	95	70-130
4-Bromofluorobenzene	99	70-130



Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 2004173-04A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	p041308c	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 4/13/20 12:39 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.50	Not Detected	2.5	Not Detected
Vinyl Chloride	0.50	Not Detected	1.3	Not Detected
Freon 11	0.50	Not Detected	2.8	Not Detected
Freon 113	0.50	Not Detected	3.8	Not Detected
1,1-Dichloroethene	0.50	Not Detected	2.0	Not Detected
2-Propanol	2.0	Not Detected	4.9	Not Detected
Carbon Disulfide	2.0	Not Detected	6.2	Not Detected
Methylene Chloride	5.0	Not Detected	17	Not Detected
Hexane	0.50	Not Detected	1.8	Not Detected
1,1-Dichloroethane	0.50	Not Detected	2.0	Not Detected
2-Butanone (Methyl Ethyl Ketone)	2.0	Not Detected	5.9	Not Detected
Chloroform	0.50	Not Detected	2.4	Not Detected
1,1,1-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Carbon Tetrachloride	0.50	Not Detected	3.1	Not Detected
Benzene	0.50	Not Detected	1.6	Not Detected
1,2-Dichloroethane	0.50	Not Detected	2.0	Not Detected
Trichloroethene	0.50	Not Detected	2.7	Not Detected
1,4-Dioxane	2.0	Not Detected	7.2	Not Detected
Toluene	0.50	Not Detected	1.9	Not Detected
1,1,2-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Tetrachloroethene	0.50	Not Detected	3.4	Not Detected
o-Xylene	0.50	Not Detected	2.2	Not Detected
TNMOC ref. to Heptane (MW=100)	10	Not Detected	41	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	98	70-130
1,2-Dichloroethane-d4	98	70-130
4-Bromofluorobenzene	100	70-130



Air Toxics

Client Sample ID: CCV

Lab ID#: 2004173-05A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	p041302	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 4/13/20 09:50 AM

Compound	%Recovery
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Freon 12	95
Vinyl Chloride	91
Freon 11	95
Freon 113	98
1,1-Dichloroethene	95
2-Propanol	91
Carbon Disulfide	91
Methylene Chloride	96
Hexane	95
1,1-Dichloroethane	96
2-Butanone (Methyl Ethyl Ketone)	88
Chloroform	97
1,1,1-Trichloroethane	92
Carbon Tetrachloride	100
Benzene	97
1,2-Dichloroethane	100
Trichloroethene	99
1,4-Dioxane	94
Toluene	96
1,1,2-Trichloroethane	97
Tetrachloroethene	103
o-Xylene	100
TNMOC ref. to Heptane (MW=100)	100

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	97	70-130
1,2-Dichloroethane-d4	95	70-130
4-Bromofluorobenzene	101	70-130



Air Toxics

Client Sample ID: LCS

Lab ID#: 2004173-06A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	p041306	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 4/13/20 11:41 AM

Compound	%Recovery	Method Limits
Freon 12	92	70-130
Vinyl Chloride	89	70-130
Freon 11	94	70-130
Freon 113	99	70-130
1,1-Dichloroethene	95	70-130
2-Propanol	90	70-130
Carbon Disulfide	87	70-130
Methylene Chloride	96	70-130
Hexane	94	70-130
1,1-Dichloroethane	97	70-130
2-Butanone (Methyl Ethyl Ketone)	86	70-130
Chloroform	98	70-130
1,1,1-Trichloroethane	92	70-130
Carbon Tetrachloride	110	70-130
Benzene	93	70-130
1,2-Dichloroethane	96	70-130
Trichloroethene	95	70-130
1,4-Dioxane	92	70-130
Toluene	92	70-130
1,1,2-Trichloroethane	92	70-130
Tetrachloroethene	100	70-130
o-Xylene	95	70-130
TNMOC ref. to Heptane (MW=100)	Not Spiked	

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	95	70-130
1,2-Dichloroethane-d4	95	70-130
4-Bromofluorobenzene	101	70-130



Air Toxics

Client Sample ID: LCSD

Lab ID#: 2004173-06AA

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	p041307	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 4/13/20 12:09 PM

Compound	%Recovery	Method Limits
Freon 12	93	70-130
Vinyl Chloride	90	70-130
Freon 11	95	70-130
Freon 113	98	70-130
1,1-Dichloroethene	97	70-130
2-Propanol	92	70-130
Carbon Disulfide	88	70-130
Methylene Chloride	96	70-130
Hexane	94	70-130
1,1-Dichloroethane	97	70-130
2-Butanone (Methyl Ethyl Ketone)	88	70-130
Chloroform	98	70-130
1,1,1-Trichloroethane	92	70-130
Carbon Tetrachloride	111	70-130
Benzene	93	70-130
1,2-Dichloroethane	97	70-130
Trichloroethene	96	70-130
1,4-Dioxane	100	70-130
Toluene	93	70-130
1,1,2-Trichloroethane	93	70-130
Tetrachloroethene	102	70-130
o-Xylene	97	70-130
TNMOC ref. to Heptane (MW=100)	Not Spiked	

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	96	70-130
1,2-Dichloroethane-d4	94	70-130
4-Bromofluorobenzene	102	70-130

2004173

AIR CHAIN OF CUSTODY RECORD

DATE: 04/07/20
PAGE: 1 OF 1

LABORATORY CLIENT: **de maximis** CLIENT PROJECT NAME / NUMBER: **Omega - OU1 SVE Monthly GAC Sampling** P.O. NO. _____

ADDRESS: **1322 Scott St., Suite 104** PROJECT ADDRESS: **12520 Whittier Blvd.** LAB CONTACT OR QUOTE NO. _____

CITY: **San Diego** STATE: **CA** ZIP: **92106** CITY: **Whittier** STATE: **CA** ZIP: **90602**

TEL: **(662) 756-8149** EMAIL: **jdinello@demaximis.com** PROJECT CONTACT: **Trent Henderson thenderson@jacobandshaffer.com**

TURNAROUND TIME: ☐ SAME DAY ☐ 24 HR ☐ 48 HR ☒ 72 HR ☐ 5 DAYS ☐ 10 DAYS

SAMPLER(S) NAME / SIGNATURE: **Philip Aher** REQUESTED ANALYSES: ☐ TO-15 (TAL 2.3)

SPECIAL INSTRUCTIONS: **EDD**

LAB USE ONLY	SAMPLE ID	FIELD ID / Point of Collection	Air Type		Sampling Equipment Info		Start Sampling Information			Stop Sampling Information		
			(i) Indoor	(ii) Soil Vap	Canister ID#	Canister Size	Flow Controller ID#	Date	Time (24hr clock)	Canister Pressure (Psi)	Date	Time (24hr clock)
1	OC_SVE_EFF_GAC_040720	SP-EFF-GAC	SV		122401	1L	21469	4/7/2020	0835	-28	4/7/2020	0842
2	OC_SVE_MID_GAC_040720	SP-MID-GAC	SV		123183	1L	22445	4/7/2020	0842	-28	4/7/2020	0849
3	OC_SVE_INF_GAC_040720	SP-INF-GAC	SV		123248	1L	26535	4/7/2020	0847	-27.5	4/7/2020	0854
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												

Refiniquished by: (Signature) *[Signature]*

Received by: (Signature) *[Signature]*

Date: 4/6/20 Time: 0919

Refiniquished by: (Signature)

Received by: (Signature)

Date: Time:

Custody Seal Intact? *[Signature]*
N None Temp *[Signature]*

5/19/2020

Ms. Jaime Dinello

DeMaximis, Inc

1340 Reynolds Ave, Suite 105

Irvine CA 92614

Project Name: Omega - OU1 SVE Monthly GAC Sampling

Project #:

Workorder #: 2005250

Dear Ms. Jaime Dinello

The following report includes the data for the above referenced project for sample(s) received on 5/12/2020 at Air Toxics Ltd.

The data and associated QC analyzed by TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics Inc. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Kelly Buettner at 916-985-1000 if you have any questions regarding the data in this report.

Regards,



Kelly Buettner

Project Manager

WORK ORDER #: 2005250

Work Order Summary

CLIENT:	Ms. Jaime Dinello DeMaximis, Inc 1340 Reynolds Ave, Suite 105 Irvine, CA 92614	BILL TO:	Mr. Tom Dorsey Omega Chemical Site Environmental Remediation Trust 1322 Scott St. Suite 104
PHONE:	949.679.9290	P.O. #	
FAX:	949.679.9078	PROJECT #	Omega - OU1 SVE Monthly GAC
DATE RECEIVED:	05/12/2020	CONTACT:	Sampling Kelly Buettner
DATE COMPLETED:	05/19/2020		

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>	<u>RECEIPT VAC./PRES.</u>	<u>FINAL PRESSURE</u>
01A	OC_SVE_EFF_GAC_050820	TO-15	2.5 "Hg	15 psi
02A	OC_SVE_MID_GAC_050820	TO-15	3.5 "Hg	15 psi
03A	OC_SVE_INF_GAC_050820	TO-15	4.5 "Hg	15 psi
04A	Lab Blank	TO-15	NA	NA
05A	CCV	TO-15	NA	NA
06A	LCS	TO-15	NA	NA
06AA	LCSD	TO-15	NA	NA

CERTIFIED BY:



Technical Director

DATE: 05/19/20

Certification numbers: AZ Licensure AZ0775, FL NELAP – E87680, LA NELAP – 02089, NH NELAP - 209218, NJ NELAP - CA016, NY NELAP - 11291, TX NELAP - T104704434-18-13, UT NELAP – CA009332019-11, VA NELAP - 460197, WA NELAP - C935

Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)

Accreditation number: CA300005-011, Effective date: 10/18/2019, Expiration date: 10/17/2020.

Eurofins Air Toxics, LLC certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Eurofins Air Toxics, LLC.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630

(916) 985-1000 . (800) 985-5955 . FAX (916) 351-8279

LABORATORY NARRATIVE
EPA Method TO-15
DeMaximis, Inc
Workorder# 2005250

Three 1 Liter Summa Canister samples were received on May 12, 2020. The laboratory performed analysis via EPA Method TO-15 using GC/MS in the full scan mode.

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

The TNMOC (Total Non-methane Organic Compounds) concentration was calculated by taking the total area counts in the sample and quantitating the area based on the response factor of TNMOC ref. to Heptane (MW=100).

Definition of Data Qualifying Flags

Ten qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

M - Reported value may be biased due to apparent matrix interferences.

CN - See Case Narrative.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

Summary of Detected Compounds EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: OC_SVE_EFF_GAC_050820

Lab ID#: 2005250-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 11	1.1	1.1	6.2	6.3
Freon 113	1.1	1.1	8.4	8.7
1,1-Dichloroethene	1.1	2.2	4.4	8.5
2-Butanone (Methyl Ethyl Ketone)	4.4	7.2	13	21
Trichloroethene	1.1	1.1	5.9	5.9
TNMOC ref. to Heptane (MW=100)	22	54	90	220

Client Sample ID: OC_SVE_MID_GAC_050820

Lab ID#: 2005250-02A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 11	1.1	1.5	6.4	8.3
Freon 113	1.1	3.4	8.8	26
1,1-Dichloroethene	1.1	2.7	4.5	11
2-Butanone (Methyl Ethyl Ketone)	4.6	6.3	14	18
TNMOC ref. to Heptane (MW=100)	23	74	94	300

Client Sample ID: OC_SVE_INF_GAC_050820

Lab ID#: 2005250-03A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 11	1.2	1.4	6.7	7.6
Freon 113	1.2	4.8	9.1	37
1,1-Dichloroethene	1.2	2.3	4.7	9.3
1,1,1-Trichloroethane	1.2	1.9	6.5	11
Trichloroethene	1.2	5.3	6.4	29
Tetrachloroethene	1.2	60	8.1	400
TNMOC ref. to Heptane (MW=100)	24	550	97	2200



Air Toxics

Client Sample ID: OC_SVE_EFF_GAC_050820

Lab ID#: 2005250-01A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	p051811	Date of Collection:	5/8/20 7:59:00 AM
Dil. Factor:	2.20	Date of Analysis:	5/18/20 03:43 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	1.1	Not Detected	5.4	Not Detected
Vinyl Chloride	1.1	Not Detected	2.8	Not Detected
Freon 11	1.1	1.1	6.2	6.3
Freon 113	1.1	1.1	8.4	8.7
1,1-Dichloroethene	1.1	2.2	4.4	8.5
2-Propanol	4.4	Not Detected	11	Not Detected
Carbon Disulfide	4.4	Not Detected	14	Not Detected
Methylene Chloride	11	Not Detected	38	Not Detected
Hexane	1.1	Not Detected	3.9	Not Detected
1,1-Dichloroethane	1.1	Not Detected	4.4	Not Detected
2-Butanone (Methyl Ethyl Ketone)	4.4	7.2	13	21
Chloroform	1.1	Not Detected	5.4	Not Detected
1,1,1-Trichloroethane	1.1	Not Detected	6.0	Not Detected
Carbon Tetrachloride	1.1	Not Detected	6.9	Not Detected
Benzene	1.1	Not Detected	3.5	Not Detected
1,2-Dichloroethane	1.1	Not Detected	4.4	Not Detected
Trichloroethene	1.1	1.1	5.9	5.9
1,4-Dioxane	4.4	Not Detected	16	Not Detected
Toluene	1.1	Not Detected	4.1	Not Detected
1,1,2-Trichloroethane	1.1	Not Detected	6.0	Not Detected
Tetrachloroethene	1.1	Not Detected	7.5	Not Detected
o-Xylene	1.1	Not Detected	4.8	Not Detected
TNMOC ref. to Heptane (MW=100)	22	54	90	220

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	109	70-130
1,2-Dichloroethane-d4	100	70-130
4-Bromofluorobenzene	101	70-130



Air Toxics

Client Sample ID: OC_SVE_MID_GAC_050820

Lab ID#: 2005250-02A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	p051810	Date of Collection:	5/8/20 8:01:00 AM
Dil. Factor:	2.29	Date of Analysis:	5/18/20 03:14 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	1.1	Not Detected	5.7	Not Detected
Vinyl Chloride	1.1	Not Detected	2.9	Not Detected
Freon 11	1.1	1.5	6.4	8.3
Freon 113	1.1	3.4	8.8	26
1,1-Dichloroethene	1.1	2.7	4.5	11
2-Propanol	4.6	Not Detected	11	Not Detected
Carbon Disulfide	4.6	Not Detected	14	Not Detected
Methylene Chloride	11	Not Detected	40	Not Detected
Hexane	1.1	Not Detected	4.0	Not Detected
1,1-Dichloroethane	1.1	Not Detected	4.6	Not Detected
2-Butanone (Methyl Ethyl Ketone)	4.6	6.3	14	18
Chloroform	1.1	Not Detected	5.6	Not Detected
1,1,1-Trichloroethane	1.1	Not Detected	6.2	Not Detected
Carbon Tetrachloride	1.1	Not Detected	7.2	Not Detected
Benzene	1.1	Not Detected	3.6	Not Detected
1,2-Dichloroethane	1.1	Not Detected	4.6	Not Detected
Trichloroethene	1.1	Not Detected	6.2	Not Detected
1,4-Dioxane	4.6	Not Detected	16	Not Detected
Toluene	1.1	Not Detected	4.3	Not Detected
1,1,2-Trichloroethane	1.1	Not Detected	6.2	Not Detected
Tetrachloroethene	1.1	Not Detected	7.8	Not Detected
o-Xylene	1.1	Not Detected	5.0	Not Detected
TNMOC ref. to Heptane (MW=100)	23	74	94	300

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	108	70-130
1,2-Dichloroethane-d4	104	70-130
4-Bromofluorobenzene	101	70-130



Air Toxics

Client Sample ID: OC_SVE_INF_GAC_050820

Lab ID#: 2005250-03A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	p051809	Date of Collection:	5/8/20 8:07:00 AM
Dil. Factor:	2.38	Date of Analysis:	5/18/20 02:44 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	1.2	Not Detected	5.9	Not Detected
Vinyl Chloride	1.2	Not Detected	3.0	Not Detected
Freon 11	1.2	1.4	6.7	7.6
Freon 113	1.2	4.8	9.1	37
1,1-Dichloroethene	1.2	2.3	4.7	9.3
2-Propanol	4.8	Not Detected	12	Not Detected
Carbon Disulfide	4.8	Not Detected	15	Not Detected
Methylene Chloride	12	Not Detected	41	Not Detected
Hexane	1.2	Not Detected	4.2	Not Detected
1,1-Dichloroethane	1.2	Not Detected	4.8	Not Detected
2-Butanone (Methyl Ethyl Ketone)	4.8	Not Detected	14	Not Detected
Chloroform	1.2	Not Detected	5.8	Not Detected
1,1,1-Trichloroethane	1.2	1.9	6.5	11
Carbon Tetrachloride	1.2	Not Detected	7.5	Not Detected
Benzene	1.2	Not Detected	3.8	Not Detected
1,2-Dichloroethane	1.2	Not Detected	4.8	Not Detected
Trichloroethene	1.2	5.3	6.4	29
1,4-Dioxane	4.8	Not Detected	17	Not Detected
Toluene	1.2	Not Detected	4.5	Not Detected
1,1,2-Trichloroethane	1.2	Not Detected	6.5	Not Detected
Tetrachloroethene	1.2	60	8.1	400
o-Xylene	1.2	Not Detected	5.2	Not Detected
TNMOC ref. to Heptane (MW=100)	24	550	97	2200

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	110	70-130
1,2-Dichloroethane-d4	102	70-130
4-Bromofluorobenzene	104	70-130



Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 2005250-04A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	p051808c	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 5/18/20 01:06 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.50	Not Detected	2.5	Not Detected
Vinyl Chloride	0.50	Not Detected	1.3	Not Detected
Freon 11	0.50	Not Detected	2.8	Not Detected
Freon 113	0.50	Not Detected	3.8	Not Detected
1,1-Dichloroethene	0.50	Not Detected	2.0	Not Detected
2-Propanol	2.0	Not Detected	4.9	Not Detected
Carbon Disulfide	2.0	Not Detected	6.2	Not Detected
Methylene Chloride	5.0	Not Detected	17	Not Detected
Hexane	0.50	Not Detected	1.8	Not Detected
1,1-Dichloroethane	0.50	Not Detected	2.0	Not Detected
2-Butanone (Methyl Ethyl Ketone)	2.0	Not Detected	5.9	Not Detected
Chloroform	0.50	Not Detected	2.4	Not Detected
1,1,1-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Carbon Tetrachloride	0.50	Not Detected	3.1	Not Detected
Benzene	0.50	Not Detected	1.6	Not Detected
1,2-Dichloroethane	0.50	Not Detected	2.0	Not Detected
Trichloroethene	0.50	Not Detected	2.7	Not Detected
1,4-Dioxane	2.0	Not Detected	7.2	Not Detected
Toluene	0.50	Not Detected	1.9	Not Detected
1,1,2-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Tetrachloroethene	0.50	Not Detected	3.4	Not Detected
o-Xylene	0.50	Not Detected	2.2	Not Detected
TNMOC ref. to Heptane (MW=100)	10	Not Detected	41	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	108	70-130
1,2-Dichloroethane-d4	102	70-130
4-Bromofluorobenzene	102	70-130



Air Toxics

Client Sample ID: CCV

Lab ID#: 2005250-05A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	p051802	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 5/18/20 09:16 AM

Compound	%Recovery
Freon 12	101
Vinyl Chloride	89
Freon 11	96
Freon 113	94
1,1-Dichloroethene	94
2-Propanol	93
Carbon Disulfide	92
Methylene Chloride	96
Hexane	96
1,1-Dichloroethane	103
2-Butanone (Methyl Ethyl Ketone)	101
Chloroform	110
1,1,1-Trichloroethane	99
Carbon Tetrachloride	105
Benzene	103
1,2-Dichloroethane	109
Trichloroethene	110
1,4-Dioxane	103
Toluene	105
1,1,2-Trichloroethane	106
Tetrachloroethene	106
o-Xylene	101
TNMOC ref. to Heptane (MW=100)	100

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	104	70-130
1,2-Dichloroethane-d4	100	70-130
4-Bromofluorobenzene	102	70-130



Air Toxics

Client Sample ID: LCS

Lab ID#: 2005250-06A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	p051804	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 5/18/20 10:13 AM

Compound	%Recovery	Method Limits
Freon 12	95	70-130
Vinyl Chloride	92	70-130
Freon 11	93	70-130
Freon 113	94	70-130
1,1-Dichloroethene	93	70-130
2-Propanol	89	70-130
Carbon Disulfide	86	70-130
Methylene Chloride	92	70-130
Hexane	94	70-130
1,1-Dichloroethane	101	70-130
2-Butanone (Methyl Ethyl Ketone)	95	70-130
Chloroform	106	70-130
1,1,1-Trichloroethane	98	70-130
Carbon Tetrachloride	117	70-130
Benzene	99	70-130
1,2-Dichloroethane	105	70-130
Trichloroethene	101	70-130
1,4-Dioxane	103	70-130
Toluene	104	70-130
1,1,2-Trichloroethane	102	70-130
Tetrachloroethene	104	70-130
o-Xylene	103	70-130
TNMOC ref. to Heptane (MW=100)	Not Spiked	

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	104	70-130
1,2-Dichloroethane-d4	102	70-130
4-Bromofluorobenzene	101	70-130



Air Toxics

Client Sample ID: LCSD

Lab ID#: 2005250-06AA

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	p051805	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 5/18/20 10:41 AM

Compound	%Recovery	Method Limits
Freon 12	92	70-130
Vinyl Chloride	93	70-130
Freon 11	89	70-130
Freon 113	91	70-130
1,1-Dichloroethene	90	70-130
2-Propanol	85	70-130
Carbon Disulfide	82	70-130
Methylene Chloride	89	70-130
Hexane	90	70-130
1,1-Dichloroethane	96	70-130
2-Butanone (Methyl Ethyl Ketone)	92	70-130
Chloroform	103	70-130
1,1,1-Trichloroethane	95	70-130
Carbon Tetrachloride	109	70-130
Benzene	99	70-130
1,2-Dichloroethane	105	70-130
Trichloroethene	102	70-130
1,4-Dioxane	104	70-130
Toluene	106	70-130
1,1,2-Trichloroethane	100	70-130
Tetrachloroethene	103	70-130
o-Xylene	103	70-130
TNMOC ref. to Heptane (MW=100)	Not Spiked	

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	104	70-130
1,2-Dichloroethane-d4	99	70-130
4-Bromofluorobenzene	104	70-130

2005250

AIR CHAIN OF CUSTODY RECORD

DATE: 05/08/20
PAGE: 1 OF 1

LABORATORY CLIENT:		CLIENT PROJECT NAME / NUMBER		P.O. NO.:								
de maximis		Omega - OUI SVE Monthly GAC Sampling										
ADDRESS:		PROJECT ADDRESS:		LAB CONTRACT OR QUOTE NO.:								
1322 Scott St., Suite 104		12520 Whittier Blvd.										
CITY:	STATE:	CITY:	STATE:	ZIP:								
San Diego	CA	Whittier	CA	90602								
TEL:	EMAIL:	PROJECT CONTACT:		LAB USE ONLY								
(662) 756-8149	jdine@demaximis.com	Trent Henderson trent.henderson@jacobandhomer.com		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>								
TURNAROUND TIME:		SAMPLER'S (NAME & SIGNATURE):		REQUESTED ANALYSES								
<input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input checked="" type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input type="checkbox"/> 10 DAYS		Khairi Ashur		[Signature]								
SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY)												
<input checked="" type="checkbox"/> EDO												
SPECIAL INSTRUCTIONS												
LAB USE ONLY	SAMPLE ID	FIELD ID / Point of Collection	Air Type	Sampling Equipment Info	Start Sampling Information	Stop Sampling Information						
			(i) Indoor (sv) Sol Vap (A) Ambient	Canister ID#	Canister Size	Flow Controller ID#	Date	Time (24hr clock)	Canister Pressure (THg)	Date	Time (24hr clock)	Canister Pressure (THg)
1	OC_SVE_EFF_GAC_050820	SP-EFF-GAC	SV	1177	1 L	21506	5/8/2020	0752	-28	5/8/2020	0759	-3
2	OC_SVE_MID_GAC_050820	SP-MID-GAC	SV	112424	1 L	21552	5/8/2020	0756	-29	5/8/2020	0801	-4
3	OC_SVE_INF_GAC_050820	SP-INF-GAC	SV	111539	1 L	21580	5/8/2020	0802	-28	5/8/2020	0807	-3.5
4												
5												
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Retiquished by: (Signature)		Received by: (Signature)		Date:								
[Signature]		[Signature]		1015								
Retiquished by: (Signature)		Received by: (Signature)		Date:								
[Signature]		[Signature]		Time:								

01A
02A
03A

6/3/2020

Ms. Jaime Dinello

DeMaximis, Inc

1340 Reynolds Ave, Suite 105

Irvine CA 92614

Project Name: Omega -OU1 SVE EFF GAC Sampling

Project #:

Workorder #: 2006001

Dear Ms. Jaime Dinello

The following report includes the data for the above referenced project for sample(s) received on 6/1/2020 at Air Toxics Ltd.

The data and associated QC analyzed by TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics Inc. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Kelly Buettner at 916-985-1000 if you have any questions regarding the data in this report.

Regards,



Kelly Buettner

Project Manager

WORK ORDER #: 2006001

Work Order Summary

CLIENT:	Ms. Jaime Dinello DeMaximis, Inc 1340 Reynolds Ave, Suite 105 Irvine, CA 92614	BILL TO:	Mr. Tom Dorsey Omega Chemical Site Environmental Remediation Trust 1322 Scott St. Suite 104
PHONE:	949.679.9290	P.O. #	
FAX:	949.679.9078	PROJECT #	Omega -OU1 SVE EFF GAC Sampling
DATE RECEIVED:	06/01/2020	CONTACT:	Kelly Buettner
DATE COMPLETED:	06/02/2020		

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>	<u>RECEIPT VAC./PRES.</u>	<u>FINAL PRESSURE</u>
01A	OC_SVE_EFF_GAC_052920	TO-15	5.3 "Hg	15 psi
02A	Lab Blank	TO-15	NA	NA
03A	CCV	TO-15	NA	NA
04A	LCS	TO-15	NA	NA
04AA	LCSD	TO-15	NA	NA

CERTIFIED BY:



Technical Director

DATE: 06/02/20

Certification numbers: AZ Licensure AZ0775, FL NELAP – E87680, LA NELAP – 02089, NH NELAP - 209218, NJ NELAP - CA016, NY NELAP - 11291, TX NELAP - T104704434-18-13, UT NELAP – CA009332019-11, VA NELAP - 460197, WA NELAP - C935

Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)

Accreditation number: CA300005-011, Effective date: 10/18/2019, Expiration date: 10/17/2020.

Eurofins Air Toxics, LLC certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Eurofins Air Toxics, LLC.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630

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LABORATORY NARRATIVE
EPA Method TO-15
DeMaximis, Inc
Workorder# 2006001

One 1 Liter Summa Canister sample was received on June 01, 2020. The laboratory performed analysis via EPA Method TO-15 using GC/MS in the full scan mode.

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

The TNMOC concentration was calculated by taking the total area counts in the sample and quantitating the area based on the response factor of TNMOC ref. to Heptane (MW=100).

Definition of Data Qualifying Flags

Ten qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

M - Reported value may be biased due to apparent matrix interferences.

CN - See Case Narrative.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

Summary of Detected Compounds EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: OC_SVE_EFF_GAC_052920

Lab ID#: 2006001-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 11	1.2	1.4	6.9	8.0
Freon 113	1.2	1.4	9.4	10
1,1-Dichloroethene	1.2	3.4	4.8	13
2-Butanone (Methyl Ethyl Ketone)	4.9	17	14	50
Trichloroethene	1.2	14	6.6	75
Tetrachloroethene	1.2	91	8.3	620
TNMOC ref. to Heptane (MW=100)	24	880	100	3600



Air Toxics

Client Sample ID: OC_SVE_EFF_GAC_052920

Lab ID#: 2006001-01A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	j060208	Date of Collection:	5/29/20 1:37:00 PM
Dil. Factor:	2.45	Date of Analysis:	6/2/20 02:59 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	1.2	Not Detected	6.0	Not Detected
Vinyl Chloride	1.2	Not Detected	3.1	Not Detected
Freon 11	1.2	1.4	6.9	8.0
Freon 113	1.2	1.4	9.4	10
1,1-Dichloroethene	1.2	3.4	4.8	13
2-Propanol	4.9	Not Detected	12	Not Detected
Carbon Disulfide	4.9	Not Detected	15	Not Detected
Methylene Chloride	12	Not Detected	42	Not Detected
Hexane	1.2	Not Detected	4.3	Not Detected
1,1-Dichloroethane	1.2	Not Detected	5.0	Not Detected
2-Butanone (Methyl Ethyl Ketone)	4.9	17	14	50
Chloroform	1.2	Not Detected	6.0	Not Detected
1,1,1-Trichloroethane	1.2	Not Detected	6.7	Not Detected
Carbon Tetrachloride	1.2	Not Detected	7.7	Not Detected
Benzene	1.2	Not Detected	3.9	Not Detected
1,2-Dichloroethane	1.2	Not Detected	5.0	Not Detected
Trichloroethene	1.2	14	6.6	75
1,4-Dioxane	4.9	Not Detected	18	Not Detected
Toluene	1.2	Not Detected	4.6	Not Detected
1,1,2-Trichloroethane	1.2	Not Detected	6.7	Not Detected
Tetrachloroethene	1.2	91	8.3	620
o-Xylene	1.2	Not Detected	5.3	Not Detected
TNMOC ref. to Heptane (MW=100)	24	880	100	3600

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	96	70-130
1,2-Dichloroethane-d4	106	70-130
4-Bromofluorobenzene	112	70-130



Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 2006001-02A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	j060107a	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 6/2/20 01:24 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.50	Not Detected	2.5	Not Detected
Vinyl Chloride	0.50	Not Detected	1.3	Not Detected
Freon 11	0.50	Not Detected	2.8	Not Detected
Freon 113	0.50	Not Detected	3.8	Not Detected
1,1-Dichloroethene	0.50	Not Detected	2.0	Not Detected
2-Propanol	2.0	Not Detected	4.9	Not Detected
Carbon Disulfide	2.0	Not Detected	6.2	Not Detected
Methylene Chloride	5.0	Not Detected	17	Not Detected
Hexane	0.50	Not Detected	1.8	Not Detected
1,1-Dichloroethane	0.50	Not Detected	2.0	Not Detected
2-Butanone (Methyl Ethyl Ketone)	2.0	Not Detected	5.9	Not Detected
Chloroform	0.50	Not Detected	2.4	Not Detected
1,1,1-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Carbon Tetrachloride	0.50	Not Detected	3.1	Not Detected
Benzene	0.50	Not Detected	1.6	Not Detected
1,2-Dichloroethane	0.50	Not Detected	2.0	Not Detected
Trichloroethene	0.50	Not Detected	2.7	Not Detected
1,4-Dioxane	2.0	Not Detected	7.2	Not Detected
Toluene	0.50	Not Detected	1.9	Not Detected
1,1,2-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Tetrachloroethene	0.50	Not Detected	3.4	Not Detected
o-Xylene	0.50	Not Detected	2.2	Not Detected
TNMOC ref. to Heptane (MW=100)	10	Not Detected	41	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	105	70-130
4-Bromofluorobenzene	94	70-130



Air Toxics

Client Sample ID: CCV

Lab ID#: 2006001-03A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	j060202	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 6/2/20 11:04 AM

Compound	%Recovery
Freon 12	106
Vinyl Chloride	94
Freon 11	101
Freon 113	100
1,1-Dichloroethene	101
2-Propanol	96
Carbon Disulfide	95
Methylene Chloride	93
Hexane	99
1,1-Dichloroethane	98
2-Butanone (Methyl Ethyl Ketone)	100
Chloroform	98
1,1,1-Trichloroethane	103
Carbon Tetrachloride	106
Benzene	96
1,2-Dichloroethane	91
Trichloroethene	94
1,4-Dioxane	107
Toluene	101
1,1,2-Trichloroethane	96
Tetrachloroethene	102
o-Xylene	119
TNMOC ref. to Heptane (MW=100)	100

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	101	70-130
4-Bromofluorobenzene	111	70-130



Air Toxics

Client Sample ID: LCS

Lab ID#: 2006001-04A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	j060203	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 6/2/20 11:29 AM

Compound	%Recovery	Method Limits
Freon 12	104	70-130
Vinyl Chloride	93	70-130
Freon 11	101	70-130
Freon 113	98	70-130
1,1-Dichloroethene	104	70-130
2-Propanol	97	70-130
Carbon Disulfide	97	70-130
Methylene Chloride	90	70-130
Hexane	103	70-130
1,1-Dichloroethane	95	70-130
2-Butanone (Methyl Ethyl Ketone)	105	70-130
Chloroform	97	70-130
1,1,1-Trichloroethane	104	70-130
Carbon Tetrachloride	104	70-130
Benzene	93	70-130
1,2-Dichloroethane	89	70-130
Trichloroethene	91	70-130
1,4-Dioxane	106	70-130
Toluene	98	70-130
1,1,2-Trichloroethane	93	70-130
Tetrachloroethene	97	70-130
o-Xylene	116	70-130
TNMOC ref. to Heptane (MW=100)	Not Spiked	

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	98	70-130
1,2-Dichloroethane-d4	102	70-130
4-Bromofluorobenzene	110	70-130



Air Toxics

Client Sample ID: LCSD

Lab ID#: 2006001-04AA

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	j060204	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 6/2/20 11:54 AM

Compound	%Recovery	Method Limits
Freon 12	100	70-130
Vinyl Chloride	93	70-130
Freon 11	96	70-130
Freon 113	93	70-130
1,1-Dichloroethene	97	70-130
2-Propanol	96	70-130
Carbon Disulfide	92	70-130
Methylene Chloride	89	70-130
Hexane	101	70-130
1,1-Dichloroethane	92	70-130
2-Butanone (Methyl Ethyl Ketone)	100	70-130
Chloroform	92	70-130
1,1,1-Trichloroethane	100	70-130
Carbon Tetrachloride	101	70-130
Benzene	93	70-130
1,2-Dichloroethane	89	70-130
Trichloroethene	89	70-130
1,4-Dioxane	106	70-130
Toluene	93	70-130
1,1,2-Trichloroethane	93	70-130
Tetrachloroethene	96	70-130
o-Xylene	117	70-130
TNMOC ref. to Heptane (MW=100)	Not Spiked	

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	100	70-130
4-Bromofluorobenzene	113	70-130

2006001

AIR CHAIN OF CUSTODY RECORD

DATE: 05/29/20
PAGE: 1 OF 1

LABORATORY CLIENT: de maximis				CLIENT PROJECT NAME / NUMBER: Omega - OU1 SVE EFF GAC Sampling				P.O. NO.:	
ADDRESS: 1322 Scott St., Suite 104				PROJECT ADDRESS: 12520 Whittier Blvd.				LAB CONTACT OR QUOTE NO.:	
CITY: San Diego		STATE: CA		ZIP: 92106		CITY: Whittier		STATE: CA	
TEL: (662) 756-8149		EMAIL: jdineho@dermaximis.com		PROJECT CONTACT: Trent Henderson trent.henderson@jacobandheffer.com		ZIP: 90602		USE ONLY: <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
TURNAROUND TIME: <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input checked="" type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input type="checkbox"/> 10 DAYS				SAMPLERS (NAME & SIGNATURE): Khalid Azhar				REQUESTED ANALYSES:	
SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY): BEDD									
SPECIAL INSTRUCTIONS:									

LAB USE ONLY	SAMPLE ID	FIELD ID / Point of Collection	SP-EFF-GAC	Air Type (I) Indoor (SV) Soil Vap (A) Ambient	Sampling Equipment Info			Start Sampling Information			Stop Sampling Information			TO-15 (TAL 2.3)
					Canister ID#	Canister Size 6L or 1L	Flow Controller ID#	Date	Time (24hr clock)	Canister Pressure (Tg)	Date	Time (24hr clock)	Canister Pressure (Tg)	
1	OC_SVE_EFF_GAC_052920			SV	112961	1 L	30740	5/29/2020	13:31	-27	5/29/2020	13:37	-5	X
2														
3														
4														
5														
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15														

Retransmitted By: (Signature)	Received By: (Signature)	Date:	Time:
<i>[Signature]</i>	<i>[Signature]</i>	6/10/20	0920
Retransmitted By: (Signature)	Received By: (Signature)	Date:	Time:
Retransmitted By: (Signature)	Received By: (Signature)	Date:	Time:

Call X
Custody Sea Impact?
V N Name Temp
ALA

OIA

6/23/2020

Ms. Jaime Dinello

DeMaximis, Inc

1340 Reynolds Ave, Suite 105

Irvine CA 92614

Project Name: Omega-OU1 SVE Monthly GAC Sampling

Project #:

Workorder #: 2006409

Dear Ms. Jaime Dinello

The following report includes the data for the above referenced project for sample(s) received on 6/16/2020 at Air Toxics Ltd.

The data and associated QC analyzed by TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics Inc. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Kelly Buettner at 916-985-1000 if you have any questions regarding the data in this report.

Regards,



Kelly Buettner

Project Manager

WORK ORDER #: 2006409

Work Order Summary

CLIENT:	Ms. Jaime Dinello DeMaximis, Inc 1340 Reynolds Ave, Suite 105 Irvine, CA 92614	BILL TO:	Mr. Tom Dorsey Omega Chemical Site Environmental Remediation Trust 1322 Scott St. Suite 104
PHONE:	949.679.9290	P.O. #	
FAX:	949.679.9078	PROJECT #	Omega-OU1 SVE Monthly GAC
DATE RECEIVED:	06/16/2020	CONTACT:	Sampling Kelly Buettner
DATE COMPLETED:	06/23/2020		

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>	<u>RECEIPT VAC./PRES.</u>	<u>FINAL PRESSURE</u>
01A	OC_SVE_EFF_GAC_061220	TO-15	5.7 "Hg	14.6 psi
02A	OC_SVE_MID_GAC_061220	TO-15	5.3 "Hg	15.8 psi
03A	OC_SVE_INF_GAC_061220	TO-15	5.3 "Hg	16.4 psi
04A	Lab Blank	TO-15	NA	NA
05A	CCV	TO-15	NA	NA
06A	LCS	TO-15	NA	NA
06AA	LCSD	TO-15	NA	NA

CERTIFIED BY:



Technical Director

DATE: 06/23/20

Certification numbers: AZ Licensure AZ0775, FL NELAP – E87680, LA NELAP – 02089, NH NELAP - 209218, NJ NELAP - CA016, NY NELAP - 11291, TX NELAP - T104704434-18-13, UT NELAP – CA009332019-11, VA NELAP - 460197, WA NELAP - C935

Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)

Accreditation number: CA300005-011, Effective date: 10/18/2019, Expiration date: 10/17/2020.

Eurofins Air Toxics, LLC certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Eurofins Air Toxics, LLC.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630

(916) 985-1000 . (800) 985-5955 . FAX (916) 351-8279

LABORATORY NARRATIVE
EPA Method TO-15
DeMaximis, Inc
Workorder# 2006409

Three 1 Liter Summa Canister samples were received on June 16, 2020. The laboratory performed analysis via EPA Method TO-15 using GC/MS in the full scan mode.

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

The TNMOC concentration was calculated by taking the total area counts in the sample and quantitating the area based on the response factor of Heptane.

Definition of Data Qualifying Flags

Ten qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

M - Reported value may be biased due to apparent matrix interferences.

CN - See Case Narrative.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

Summary of Detected Compounds

EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: OC_SVE_EFF_GAC_061220

Lab ID#: 2006409-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	1.2	2.7	4.9	11
2-Propanol	4.9	9.9	12	24
2-Butanone (Methyl Ethyl Ketone)	4.9	62	14	180
Trichloroethene	1.2	5.4	6.6	29
Tetrachloroethene	1.2	27	8.3	180
TNMOC ref. to Heptane (MW=100)	25	280	100	1100

Client Sample ID: OC_SVE_MID_GAC_061220

Lab ID#: 2006409-02A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 11	1.3	1.8	7.1	10
Freon 113	1.3	3.5	9.6	27
1,1-Dichloroethene	1.3	3.0	5.0	12
2-Propanol	5.0	8.5	12	21
2-Butanone (Methyl Ethyl Ketone)	5.0	75	15	220
1,1,1-Trichloroethane	1.3	1.4	6.9	7.6
TNMOC ref. to Heptane (MW=100)	25	190	100	780

Client Sample ID: OC_SVE_INF_GAC_061220

Lab ID#: 2006409-03A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 113	1.3	4.2	9.8	32
1,1-Dichloroethene	1.3	3.3	5.1	13
2-Propanol	5.1	5.9	13	14
2-Butanone (Methyl Ethyl Ketone)	5.1	25	15	73
1,1,1-Trichloroethane	1.3	3.1	7.0	17
Trichloroethene	1.3	5.0	6.9	27
Tetrachloroethene	1.3	52	8.7	360
TNMOC ref. to Heptane (MW=100)	26	320	100	1300



Air Toxics

Client Sample ID: OC_SVE_EFF_GAC_061220

Lab ID#: 2006409-01A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	j061817	Date of Collection:	6/12/20 10:52:00 AM
Dil. Factor:	2.46	Date of Analysis:	6/18/20 10:33 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	1.2	Not Detected	6.1	Not Detected
Vinyl Chloride	1.2	Not Detected	3.1	Not Detected
Freon 11	1.2	Not Detected	6.9	Not Detected
Freon 113	1.2	Not Detected	9.4	Not Detected
1,1-Dichloroethene	1.2	2.7	4.9	11
2-Propanol	4.9	9.9	12	24
Carbon Disulfide	4.9	Not Detected	15	Not Detected
Methylene Chloride	12	Not Detected	43	Not Detected
Hexane	1.2	Not Detected	4.3	Not Detected
1,1-Dichloroethane	1.2	Not Detected	5.0	Not Detected
2-Butanone (Methyl Ethyl Ketone)	4.9	62	14	180
Chloroform	1.2	Not Detected	6.0	Not Detected
1,1,1-Trichloroethane	1.2	Not Detected	6.7	Not Detected
Carbon Tetrachloride	1.2	Not Detected	7.7	Not Detected
Benzene	1.2	Not Detected	3.9	Not Detected
1,2-Dichloroethane	1.2	Not Detected	5.0	Not Detected
Trichloroethene	1.2	5.4	6.6	29
1,4-Dioxane	4.9	Not Detected	18	Not Detected
Toluene	1.2	Not Detected	4.6	Not Detected
1,1,2-Trichloroethane	1.2	Not Detected	6.7	Not Detected
Tetrachloroethene	1.2	27	8.3	180
o-Xylene	1.2	Not Detected	5.3	Not Detected
TNMOC ref. to Heptane (MW=100)	25	280	100	1100

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	96	70-130
1,2-Dichloroethane-d4	109	70-130
4-Bromofluorobenzene	108	70-130



Air Toxics

Client Sample ID: OC_SVE_MID_GAC_061220

Lab ID#: 2006409-02A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	j061818	Date of Collection:	6/12/20 11:02:00 AM
Dil. Factor:	2.52	Date of Analysis:	6/18/20 10:59 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	1.3	Not Detected	6.2	Not Detected
Vinyl Chloride	1.3	Not Detected	3.2	Not Detected
Freon 11	1.3	1.8	7.1	10
Freon 113	1.3	3.5	9.6	27
1,1-Dichloroethene	1.3	3.0	5.0	12
2-Propanol	5.0	8.5	12	21
Carbon Disulfide	5.0	Not Detected	16	Not Detected
Methylene Chloride	13	Not Detected	44	Not Detected
Hexane	1.3	Not Detected	4.4	Not Detected
1,1-Dichloroethane	1.3	Not Detected	5.1	Not Detected
2-Butanone (Methyl Ethyl Ketone)	5.0	75	15	220
Chloroform	1.3	Not Detected	6.2	Not Detected
1,1,1-Trichloroethane	1.3	1.4	6.9	7.6
Carbon Tetrachloride	1.3	Not Detected	7.9	Not Detected
Benzene	1.3	Not Detected	4.0	Not Detected
1,2-Dichloroethane	1.3	Not Detected	5.1	Not Detected
Trichloroethene	1.3	Not Detected	6.8	Not Detected
1,4-Dioxane	5.0	Not Detected	18	Not Detected
Toluene	1.3	Not Detected	4.7	Not Detected
1,1,2-Trichloroethane	1.3	Not Detected	6.9	Not Detected
Tetrachloroethene	1.3	Not Detected	8.5	Not Detected
o-Xylene	1.3	Not Detected	5.5	Not Detected
TNMOC ref. to Heptane (MW=100)	25	190	100	780

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	94	70-130
1,2-Dichloroethane-d4	114	70-130
4-Bromofluorobenzene	104	70-130



Air Toxics

Client Sample ID: OC_SVE_INF_GAC_061220

Lab ID#: 2006409-03A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	j061819	Date of Collection:	6/12/20 11:08:00 AM
Dil. Factor:	2.57	Date of Analysis:	6/18/20 11:25 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	1.3	Not Detected	6.4	Not Detected
Vinyl Chloride	1.3	Not Detected	3.3	Not Detected
Freon 11	1.3	Not Detected	7.2	Not Detected
Freon 113	1.3	4.2	9.8	32
1,1-Dichloroethene	1.3	3.3	5.1	13
2-Propanol	5.1	5.9	13	14
Carbon Disulfide	5.1	Not Detected	16	Not Detected
Methylene Chloride	13	Not Detected	45	Not Detected
Hexane	1.3	Not Detected	4.5	Not Detected
1,1-Dichloroethane	1.3	Not Detected	5.2	Not Detected
2-Butanone (Methyl Ethyl Ketone)	5.1	25	15	73
Chloroform	1.3	Not Detected	6.3	Not Detected
1,1,1-Trichloroethane	1.3	3.1	7.0	17
Carbon Tetrachloride	1.3	Not Detected	8.1	Not Detected
Benzene	1.3	Not Detected	4.1	Not Detected
1,2-Dichloroethane	1.3	Not Detected	5.2	Not Detected
Trichloroethene	1.3	5.0	6.9	27
1,4-Dioxane	5.1	Not Detected	18	Not Detected
Toluene	1.3	Not Detected	4.8	Not Detected
1,1,2-Trichloroethane	1.3	Not Detected	7.0	Not Detected
Tetrachloroethene	1.3	52	8.7	360
o-Xylene	1.3	Not Detected	5.6	Not Detected
TNMOC ref. to Heptane (MW=100)	26	320	100	1300

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	95	70-130
1,2-Dichloroethane-d4	113	70-130
4-Bromofluorobenzene	116	70-130



Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 2006409-04A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	j061806f	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 6/18/20 11:22 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.50	Not Detected	2.5	Not Detected
Vinyl Chloride	0.50	Not Detected	1.3	Not Detected
Freon 11	0.50	Not Detected	2.8	Not Detected
Freon 113	0.50	Not Detected	3.8	Not Detected
1,1-Dichloroethene	0.50	Not Detected	2.0	Not Detected
2-Propanol	2.0	Not Detected	4.9	Not Detected
Carbon Disulfide	2.0	Not Detected	6.2	Not Detected
Methylene Chloride	5.0	Not Detected	17	Not Detected
Hexane	0.50	Not Detected	1.8	Not Detected
1,1-Dichloroethane	0.50	Not Detected	2.0	Not Detected
2-Butanone (Methyl Ethyl Ketone)	2.0	Not Detected	5.9	Not Detected
Chloroform	0.50	Not Detected	2.4	Not Detected
1,1,1-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Carbon Tetrachloride	0.50	Not Detected	3.1	Not Detected
Benzene	0.50	Not Detected	1.6	Not Detected
1,2-Dichloroethane	0.50	Not Detected	2.0	Not Detected
Trichloroethene	0.50	Not Detected	2.7	Not Detected
1,4-Dioxane	2.0	Not Detected	7.2	Not Detected
Toluene	0.50	Not Detected	1.9	Not Detected
1,1,2-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Tetrachloroethene	0.50	Not Detected	3.4	Not Detected
o-Xylene	0.50	Not Detected	2.2	Not Detected
TNMOC ref. to Heptane (MW=100)	10	Not Detected	41	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	98	70-130
1,2-Dichloroethane-d4	114	70-130
4-Bromofluorobenzene	100	70-130



Air Toxics

Client Sample ID: CCV

Lab ID#: 2006409-05A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	j061802	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 6/18/20 09:06 AM

Compound	%Recovery
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Freon 12	126
Vinyl Chloride	94
Freon 11	125
Freon 113	112
1,1-Dichloroethene	112
2-Propanol	99
Carbon Disulfide	97
Methylene Chloride	92
Hexane	99
1,1-Dichloroethane	100
2-Butanone (Methyl Ethyl Ketone)	108
Chloroform	110
1,1,1-Trichloroethane	122
Carbon Tetrachloride	125
Benzene	92
1,2-Dichloroethane	102
Trichloroethene	97
1,4-Dioxane	107
Toluene	98
1,1,2-Trichloroethane	91
Tetrachloroethene	107
o-Xylene	116
TNMOC ref. to Heptane (MW=100)	100

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	98	70-130
1,2-Dichloroethane-d4	112	70-130
4-Bromofluorobenzene	117	70-130



Air Toxics

Client Sample ID: LCS

Lab ID#: 2006409-06A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	j061803	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 6/18/20 09:31 AM

Compound	%Recovery	Method Limits
Freon 12	120	70-130
Vinyl Chloride	89	70-130
Freon 11	120	70-130
Freon 113	108	70-130
1,1-Dichloroethene	107	70-130
2-Propanol	99	70-130
Carbon Disulfide	95	70-130
Methylene Chloride	87	70-130
Hexane	97	70-130
1,1-Dichloroethane	96	70-130
2-Butanone (Methyl Ethyl Ketone)	100	70-130
Chloroform	106	70-130
1,1,1-Trichloroethane	117	70-130
Carbon Tetrachloride	119	70-130
Benzene	90	70-130
1,2-Dichloroethane	102	70-130
Trichloroethene	95	70-130
1,4-Dioxane	107	70-130
Toluene	95	70-130
1,1,2-Trichloroethane	89	70-130
Tetrachloroethene	103	70-130
o-Xylene	114	70-130
TNMOC ref. to Heptane (MW=100)	Not Spiked	

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	112	70-130
4-Bromofluorobenzene	119	70-130



Air Toxics

Client Sample ID: LCSD

Lab ID#: 2006409-06AA

EPA METHOD TO-15 GC/MS FULL SCAN

File Name: j061804
Dil. Factor: 1.00

Date of Collection: NA
Date of Analysis: 6/18/20 09:56 AM

Compound	%Recovery	Method Limits
Freon 12	118	70-130
Vinyl Chloride	91	70-130
Freon 11	119	70-130
Freon 113	108	70-130
1,1-Dichloroethene	104	70-130
2-Propanol	99	70-130
Carbon Disulfide	93	70-130
Methylene Chloride	88	70-130
Hexane	96	70-130
1,1-Dichloroethane	93	70-130
2-Butanone (Methyl Ethyl Ketone)	103	70-130
Chloroform	105	70-130
1,1,1-Trichloroethane	118	70-130
Carbon Tetrachloride	120	70-130
Benzene	89	70-130
1,2-Dichloroethane	98	70-130
Trichloroethene	93	70-130
1,4-Dioxane	104	70-130
Toluene	94	70-130
1,1,2-Trichloroethane	90	70-130
Tetrachloroethene	102	70-130
o-Xylene	115	70-130
TNMOC ref. to Heptane (MW=100)	Not Spiked	

Container Type: NA - Not Applicable


Surrogates	%Recovery	Method Limits
Toluene-d8	97	70-130
1,2-Dichloroethane-d4	109	70-130
4-Bromofluorobenzene	120	70-130

2006409

AIR CHAIN OF CUSTODY RECORD

DATE: 6/12/20

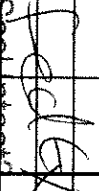
PAGE: 1 OF 1

LABORATORY CLIENT:		CLIENT PROJECT NAME / NUMBER		P.O. NO.	
de maximis		Omega - OU1 SVE Monthly GAC Sampling			
ADDRESS:		PROJECT ADDRESS:		LAB CONTRACT OR QUOTE NO.	
1322 Scott St., Suite 104		12520 Whittier Blvd.			
CITY:	STATE:	CITY:	STATE:	ZIP:	
San Diego	CA	Whittier	CA	90602	
TEL:	EMAIL:	PROJECT CONTACT:		LAB USE ONLY	
(662) 756-8149	ldirello@demaximis.com	Trent Henderson trent.henderson@jacobandhoffer.com		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
TURNAROUND TIME:		SAMPLE(S) NAME / SIGNATURE:		REQUESTED ANALYSES	
<input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input checked="" type="checkbox"/> 10 DAYS		Khalid Abu 			
SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY)					
<input checked="" type="checkbox"/> EDD					
SPECIAL INSTRUCTIONS:					


LAB USE ONLY	SAMPLE ID	FIELD ID / Point of Collection	Air Type		Sampling Equipment Info		Start Sampling Information		Stop Sampling Information		TO-15 (TAL 2.3)		
			(i) Indoor (SV) Soil Vap (A) Ambient	Canister ID#	Canister Size	Flow Controller ID#	Date	Time (24hr clock)	Canister Pressure (Psi)	Date		Time (24hr clock)	Canister Pressure (Psi)
1	OC_SVE_EFF_GAC_061220	SP-EFF-GAC	SV	1L2008	1L	21412	6/12/20	1046	-25	6/12/20	1052	-5	X
2	OC_SVE_MID_GAC_061220	SP-MID-GAC	SV	1L1936	1L	22534	6/12/20	1057	-23.5	6/12/20	1102	-5	X
3	OC_SVE_INF_GAC_061220	SP-INF-GAC	SV	1L2311	1L	22368	6/12/20	1103	-26	6/12/20	1108	-5	X
4													
5													
6													
7													
8													
9													
10													
11													
12													
13													
14													
15													

Custody Seal Intact?


Y N None Temp NA



Relinquished by: (Signature)




Received by: (Signature)

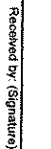


Date: 6/16/20 Time: 1037

Relinquished by: (Signature)



Received by: (Signature)



Date: Time:

ATTACHMENT G

Data Validation Repots

Data Quality Assessment
Vapor Phase GAC
OU-1 Full Scale On-Site Soil Remedy, Omega Chemical Superfund Site
Second Quarter 2020

SDG Number	Sample ID	Collection Date	Number of Samples	Analysis Method	QC Reviewed	Data Usability
2004173	OC_SVE_EFF_GAC_040720	04/07/2020	3	TO15	IC, CCB, Holding Times, Sample Receipt Conditions, Surrogates, MB, LCS/LCSD	The TNMOC value reported should not be used as TVOC as it is not the sum of the reported concentrations. No other qualification of sample results was warranted.
	OC_SVE_INF_GAC_040720					
	OC_SVE_MID_GAC_040720					
2005250	OC_SVE_EFF_GAC_050820	05/08/2020	3	TO15	IC, CCB, Holding Times, Sample Receipt Conditions, Surrogates, MB, LCS/LCSD	The TNMOC value reported should not be used as TVOC as it is not the sum of the reported concentrations. No other qualification of sample results was warranted.
	OC_SVE_INF_GAC_050820					
	OC_SVE_MID_GAC_050820					
2006409	OC_SVE_EFF_GAC_061220	06/12/2020	3	TO15	IC, CCB, Holding Times, Sample Receipt Conditions, Surrogates, MB, LCS/LCSD	The TNMOC value reported should not be used as TVOC as it is not the sum of the reported concentrations. No other qualification of sample results was warranted.
	OC_SVE_INF_GAC_061220					
	OC_SVE_MID_GAC_061220					

ATTACHMENT H

Summary of Indoor Air and Ambient Air Concentrations

(Not Included this Quarter)